

THE

INDIAN RAILWAYS:

THEIR HISTORICAL, ECONOMICAL AND ADMINISTRATIVE ASPECTS

BY

RAI SAHEB CHANDRIKA PRASADA TIWARI,

Retired Assistant Traffic Superintendent, B. E. & C. I. Railway,

President, All-India Railwaymen's Conference 1921.

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TO

THE SACRED MEMORY OF

ONE WHOSE

Kindly guidance and generous help in early years,

no tribute of mine can ever Repay—

MY LAMENTED COUSIN

Narayan Sewak Tiwari,

WHO DIED AT THE AGE OF 69 YEARS,
ON KARTIKA KRISHNA 5TH SAMVAT 1950 VIKRAM
AT RAWULPINDEE.

BY THE SAME AUTHOR.

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PREFACE.

THE subjects of Railway administration and Railway Economics are very large and will occupy a number of volumes of this size. I have written this book for the information of the Indian people, only touching briefly some of the elementary subjects and some of the matters which vitally affect the economic condition of the country at present. My object is to bring about a healthy reform in the administration of the Indian railways which are the largest and most vital among the national properties of the country. The book is especially interesting as it deals prominently with the question of State *versus* Company management, which has been occupying the public mind in India for more than a generation.

This is the first book of the kind, giving expression as it does, to the Indian view of the matter. It gives a very moderate account of Indian Railway economics, administration, finance and management including Rates and Fares, Constitution of the Companies, their working results, the economic effects they have produced, and the problems now facing the country.

In the Prefatory Note to his pamphlet on "Indian Railway Finance," 1912, the Hon'ble Sir Dinshaw Eduljee Wacha emphasized the "eminent necessity of a complete narrative of railway finance which shall inform us as to what the gain or loss there has been from year to year, with the causes which have led to it." The absence of such a book has been generally felt in India; it is hoped that that want will be fully met by this volume.

The financial narratives are supported by statistics giving the annual losses and gains to the State from different classes of the

Railways from 1848-49 to 1919-20, see appendices 2 to 8, These tables have been compiled for the first time and form an important record not easily obtainable.

The historical facts put together and compared with subsequent events in India and with corresponding practice of other countries, combined with the personal experience gained in the actual working, enable us to see the defects and draw-backs of the prevailing systems. With such lights, suggestions have been made for important reforms summarized at pages 538-40. Having fully discussed the matter of public wants, comforts and conveniences, requirements of trade, commerce and industries, efficiency of the service, and railway economics, I confidently hope that the book will meet the requirements of railway administrators as well as railwaymen, students of Indian economics, railway promoters, commercial men, leaders of political thought, investors of capital, members of the reformed Councils, and the public generally; while the Princes and officials of the Indian States will welcome it as a safe guide in organizing an economical administration for their own Railways.

Apart from the experience of actual working of railways, gained during an active service of over 37 years, on railways worked both by the Government and by one of the principal companies in India, I made a special study of the subject soon after the issue of the Report of the Select Committee of 1884. My first observations appeared in the first Hindi Daily—the late “*Hindosthan*” of Kalakankar, under the headings “Our Railways,” “Our Guaranteed Railways,” “Indian State Railways,” etc., during the years 1889 and 1890, under the distinguished Editorship of Pandit Madan Mohan Malaviya. I resumed the subject in 1915, when my contributions appeared in several Journals like the “*Leder*” of Allahabad, the “*Modern Review*” of Calcutta, the “*Servant of India*,” Poona, the “Journal of the Indian Economic Society.” Bombay.

It was intended to publish this book in 1919, and most of the Statistics previously compiled were revised in that year; but owing to unavoidable circumstances the narrative could not be completed till now. The facts and figures given herein are mostly for the period up to the year 1917-18, except where otherwise stated. In important places the figures for the two subsequent years have been added, making them complete for the whole period for which the accounts have been published by the Government of India.

It is difficult to give a continuous narrative of the State Railways, as many of them have been largely extended or amalgamated and their administrations have undergone important changes.

An effort has, however, been made to give the main epochs of the Railway History. The first epoch is narrated at pages 205-45, the second epoch from page 246, and the third epoch from page 331. But as the railways of one class overlapped the other classes and there were many changes and amalgamations among the individual lines or systems, it was not possible within the compass of this volume, to give a progressive account of individual lines.

Many of the railways, originally built and worked by the direct agency of the Government, have been subsequently leased to Companies; while several lines, taken over from the Companies, have been merged into the systems worked by the Government. These changes and interchanges have complicated the historical records and accounts of the individual lines.

Records for the old Guaranteed Companies' lines were, however, kept distinct for the whole period of their operations from 1848 to 1907. Their transactions, dealt with in Chapter III, form the worst record in the whole history.

The State-management, which followed the old Guaranteed Companies in 1869, did not have that chance which it deserved, as the best of the State Railways, after a successful working, were snatched away by the influential Companies from 1879 and

1885, leaving the unprofitable lines for the Government to manage. The accounts of *all* State Railways are, however, lumped together in the Finance and Revenue Accounts of the Government.

Moreover an accurate comparison of the different railways cannot well be made from the statistics alone, as the factors governing the costs of working differ considerably in the various parts of the country.

For these reasons I have not attempted to closely examine in detail the working results of the State railways entrusted to the Agency Companies. A comparison of some of the working results of the individual systems is, however, possible and may be useful ; but this would involve the compilation of elaborate statistics for each of the Companies' and the Government administrations for the whole period of over 66 years. Single-handed as I have worked, I could not possibly attempt that work. It is, however, hoped that such a comparison of the railway details may some day be completed by some energetic Railwaymen.

I had two main disadvantages to contend with. One with the language, which is not my mother tongue, and I have no pretension of having that command over the English language which is necessary to write an important book like this. But this difficulty could not be avoided, as English is the only medium between the people of the various provinces in India.

The second disadvantage is that I have not had at my disposal some of the material necessary for a complete history. In my humble way I have made an attempt to put together such facts and figures as I have come across and been able to collect. They cover most of the ground. There may, however, be some links missing. Readers will therefore make an allowance for these difficulties and will overlook any omission or inaccuracy in expression. Any errors pointed out to me will at once be noted for the next edition.

Railways are truly called the vital organs of industry and commerce and the very main-springs of material progress. If

PREFACE.

properly worked and fully taken advantage of by the people, railways should transform the whole country; but unfortunately the people of India were not sufficiently educated to make full use of the railways for their benefit, and a good deal has been lost on that account. It is hoped, however, with the general enlightenment now spreading in the country and with the reforms suggested herein, the people of India will soon be able to make up for what they have lost in the past, and will take care to prevent any further losses in the future.

There are serious defects in the administrative machinery of the State Railways, resulting in losses both in costs and in the effects on general industries, trade and commerce of the country. Suggestions have therefore been put forward for a reorganisation of the whole system of administration and working, with special provision for a systematic training of railway officials and subordinates.—

- (1) To improve the status of the men and to ensure a maximum of efficiency with a minimum of labour and cost;
- (2) To utilize the railways to best advantage in supplying transportation and in mechanical training for Scientific Agriculture and manufacturing industries of all kinds, Chapter I, Section 8, and Chapter II-5.
- (3) To remodel the present system of working, so as to prevent the same work being done several times over, Chapter II-6.
- (4) To make retrenchments in the costs of working.

The agencies employed for the State Railways come under two heads, *viz*:—

- (1) Companies' administrations and
- (2) Government "

The main controversy is which of these two agencies is the better. The History of the Indian Railways is decidedly in favour of the Government agency and against that of companies, see Chapters II, III, VI and VIII. Wherever faults have been

found with the State-management, they are attributable to the system of government. As that system is being changed, the State-management under the reformed Councils will make headway and meet the public requirements satisfactorily. It is now recommended by the Railway Committee that this system will be adopted for all State railways as and when the existing contracts of the Companies fall in.

For nearly three quarters of a century the Railways in India have been exclusively under the direction and control of Englishmen. They have constructed a fine system of railways, based on the Socialistic principle of State ownership—a system in advance of the Company ownership still in force in England, but in many important respects they have ignored the requirements of the Indian people. To meet these requirements, the railways must be brought under the control of the people.

My best thanks are due to the administrative authorities of the Continental Railways for the courtesies shown to me during my travels over their lines in 1911 and 1914 and for the statistics they have been good enough to furnish me with. My thanks are also due to the Minister of the Japanese Government, to the Indian Railway Board, and the Financial Secretary to the Government of India for supplying me with certain publications.

It is far from my desire to cast reflections against any person. Deeply should I regret if a single expression of mine were found unfair or likely to wound just sensibilities.

My work is a labour of love in the Service of the Motherland. I have written it as a duty I owed to my fellow beings. My privilege is to work and the fruit belongs to Him, who rules the Universe. If the conditions under which millions of my country men and women are daily suffering, are remedied, my labours will be amply rewarded.

CHANDRIKA PRASADA TIWARI.

Ajmer, 26th September 1921.

P. S.—At pages 430 and 549, we have referred to average rates of passenger fares on the Japanese State Railways.

Since writing that we have received the Tariffs of those Railways. Their passenger fares as well as goods rates are on sliding scales. The ordinary 3rd class fares are calculated as follows:—

		Per mile.	
		Sen.	Pies.
For first 50 miles or under	...	2·5 equal to	7·200
„ 51 to 100 miles	...	2·1 „	6·048
„ 101 to 200 „	...	1·7 „	4·896
„ 201 to 300 „	...	1·4 „	4·032
„ 301 to 400 „	...	1·2 „	3·456
„ 401 to 500 „	...	1·1 „	3·168
„ over 500 „	...	1·0 „	2·880

They work out as under:—

	Rs. a.	Pies per mile.
For 500 miles	11 9	4·435
„ 600 „	13 1	4·176
„ 700 „	14 9	3·991
„ 800 „	16 1	3·852
„ 900 „	17 9	3·744
„ 1,000 „	19 1	3·657

The second class ordinary passenger fares are twice, and the first class ordinary passenger fares are thrice, the 3rd class ordinary passenger fares.

A small extra charge is made for Express trains and for 1st class and 2nd class sleeping berths.

A reduction of 20 to 50 per cent. is made off 2nd and 3rd class fares for Schools and Colleges, for public meetings of corporations, etc., and of 10 to 60 per cent. for special and ordinary parties of 50 or more persons travelling together.

The goods tariff is very simple, occupying 79 pages of this size only, with Rules, Classification, and one general Rate List

for distances of 5 to 2,200 miles, for the five ordinary classes of goods. There are two sets of rates, one for small consignments, and the other for Car loads. For a haul of 1,000 miles, the Car load rates give the following charge per ton per mile :—

1st Class goods 8·8992 pies.

2nd „ „ 6·6816 „

3rd „ „ 5·2128 „

4th „ „ 4·320 „

5th „ „ 3·744 „

The following are the goods rates, per 100 *kin* of about 133 lbs. English, for smaller consignments, the last column giving the rate *per maund* for the *lowest class* :—

	1st Class.	2nd Class	3rd Class.	4th Class.	5th Class.	
					Sen per 100 kin.	Pies per maund.
For 100 Miles.	Sen. 70	Sen. 54	Sen. 48	Sen. 35	29	61
„ 200 „	110	88	65	52	42	75
„ 300 „	143	108	84·5	67	54	95
„ 400 „	176	133	104	82	66	118
„ 500 „	208	156	122	95·5	77	135
„ 600 „	236	178	139	109	88	155
„ 700 „	266	201	157	123	99	175
„ 800 „	296	223	174	136	110	196
„ 900 „	324	244	190	149	120	213
„ 1000 „	352	265	206	161	130	231
„ 1300 „	436	328	254	199	160	255
„ 1600 „	520	391	302	236	190	287
„ 1900 „	604	454	350	274	220	322
„ 2200 „	688	517	398	311	250	348

A Sen is equal to about 2·88 pies with exchange at 1s. 4d. per rupee.

11th October 1921.

C. P. T.

CORRIGENDUM.

Page.	Line	Incorrect.	Correct.
ii Preface	32	Leder	Leader.
7	15	Appendix 17	Appendix 16.
19	17	clause 4	clause 7.
24	20	Section 5	Section 5A
31	7	67,402,203	867,402,209.
42	14	go	goes.
43	Foot note.	Accounts No.	Account No.
44	19	periods	period.
135	9	land	land.
187	31	recommendation	recommendation.
141	35	to the	to be,
148	8	qualification	qualification.
154	21	few and are	few and rare.
184	20	hind	kind.
292	11	caes	causes.
304	22	philanthopie	philanthropic.
"	34	principals	principles.
"	37	the avoid	to avoid.
299	5	Itaties	Italica.
316	16	such arduous	much arduous.
319	26	pressure.	pressure.
323	15	devolve.	Devolves.
327	29	Stch	such.
xliii	Heading	1920-21	1919-20.
391	10	160	1-60.
427	5	para. 435	page 435.
430	33	7. Average Coaching passengers per vehicle	7. Average number of passengers per vehicle.
434	17	3 pies to 3-61 pies	3 pies to 13-61 pies.
456	22	draw	drew.
473	14	belong	belonging.
490	34	Statutory	Statutory.
509	32	wite	with.
533	33	inconsiderable	in considerable.
79	15	Omit full-stop between "like" and "On," and change the capital O of "On."	
99	16	Insert semi-colon between "Railways" and "on."	
263	Foot notes	Exchange the star and dagger marks of the two foot-notes.	
xxviii	...	Delete "Re," from columns 2 to 3.	
xxx	...	Ditto ditto ditto.	
xxxii	...	Ditto ditto 2 to 6.	
470	19 20	Transpose word "heard" from line 19 to line 20 between first and second words.	

INDIAN RAILWAYS:

Their Historical, Financial and administrative
Aspects.

CHAPTER I.—General.

SECTION 1.—Progress in Open Lines.

THE locomotive engine was perfected in England by George Stephenson in the year 1814. Upto 1825 England had a total length of only about 400 miles of railway owned by 29 companies. An interesting account of the origin of the railway, invention of the steam engine, and of the general conditions which prevailed in England during the pre-rail days, is given in Appendix No. 1. By the year 1840 nearly every important district in that country was reached by railway. Its introduction had wonderfully transformed the whole of the moral, material, economic, industrial and general conditions of that country, and the railway mania was at its height when the earliest proposals for the construction of a railway in India were put forward in 1843-44.

The first railway opened in India is the G. I. P. Railway, its first section of 20½ miles from Bombay to Thana was opened to traffic on the 18th April 1853, followed by its second section of 12.42 miles from Thana to Kalyan, opened on the 1st May 1854. Then the first section on the E. I. Railway, Howrah to Hoogly, 23.28 miles long, was opened on the 15th August 1854, followed by its second section of 14.31 miles from Hoogly to Pundooah, opened 16 days after, on the 1st September of the same year.

Appendix No. 9 shows the progress made in the extension of railway communication in India from commencement to the end of the year 1917-18, with the general results of their working. The length of lines opened for traffic and the capital spent on the open lines, excluding that on railways under construction, was as shown below:—

Years.	Miles opened for traffic.	Capital expended in lakhs of rupees.
1850—60	838	26,66·00
1861—70	3,933	63,34·50
1871—80	4,225	38,56·41
1881—90	7,408	85,10·13
1891—1900	8,348	1,15,86·30
1901—10	7,347	1,09,51·39
1911—17	4,234	1,02,75·17
Total	36,333	(a) 5,41,79·90

The average annual construction of railways during the first decade was less than 100 miles; in the fifth decade it rose to 834·8 miles or 2·28 miles per day.

The annual *Capital* outlay averaged 266·6 lakhs in the first decade and it rose to 1,158·63 lakhs in the fifth and to 1,467·88 lakhs during the current decade.

The greatest progress in the construction of railways in India was during the closing period of the nineteenth century. Since then the rate of progress in constructing new lines was somewhat reduced but the Capital expenditure grew up from about 11·5 crores per annum during 1891-1900 to 14·67 crores

(a) This does not include outlay on lines under construction, Rs. 574·80 lakhs and certain liabilities amounting to £14,871,000 on account of the State Railways. The subject of capital costs and liabilities of the State on account of the Indian Railways is dealt with in section 5 of this Chapter.

during 1911-17. A large portion of this growth of expenditure was on

Improvement of the open lines.

During the seven years from 1900-01 to 1906-07 the Capital expenditure under the Government programme amounted to £50,247,630, of which £27,411,120 was spent on additional rolling stock and improvement of open lines and £22,836,510 on the construction of new lines, giving the annual averages in rupees and pounds as under ⁽¹⁾ :—

	Lakhs of rupees	Pounds.
Total outlay	10,76,734	£7,178,233
Additional equipment of open lines.	5,87,381	£3,915,874
Construction of new lines	4,89,353	£3,262,359

During the nine calendar years from 1892 to 1900, the amount expended on the improvement of open lines averaged 242.22 lakhs equal to £1,614,800 per annum, the figures for each year being as under ⁽²⁾ :—

Year.	Lakhs.	Year.	Lakhs.
1892	164	1897	250
1893	206	1898	174
1894	136	1899	402
1895	194	1900	453
1896	201		

Total ... 2,180 = £14,533,333

Open Mileage.

The total mileage on 31st March 1918 was 36,333.47 miles open and 1,596.40 miles under construction or under sanction for

(1) Para. 10 of the Report of the Committee on Indian Railway Finance and Administration, 1908.

(2) Para. 96 of Mr. Robertson's Report, 1903.

construction on the same date. The open lines were on four different gauges, viz:—

		Miles.
5'-6"	The standard or Broad-gauge	17,876.27
3' 3 $\frac{3}{4}$ "	The Metre-gauge	15,025.58
2'-6"	} Light Railways	{ 2,802.23
2'-0"			629.39
		<hr/> 36,333.47

To the above total should be added 21.34 miles of 5'-6" gauge railways owned and worked by:—

	Miles.
Calcutta Port Commissioners	15.34
Bombay Port Trust	6.00

which were not included in the Railway Board's Appendix 3 to their Administration Report, Volume II, for 1917-18, nor were the particulars of their capital cost of working results given in that Report.

SECTION 2.—Classification of Railways.

The Railways were classified by the Railway Board under fourteen different heads as shown in Appendix No. 17.

According to ownership they came under four main heads, viz.—

	LENGTH OPEN.		CAPITAL COST OF OPEN LINES ONLY.	
	Miles.	Percent- age on total.	Thousands of rupees.	Percent- age on total.
State Railways	26,183	72.06	472,88,13	87.28
Indian State Rys.	5,027	13.84	29,79,91	5.50
Companies' Rys.	4,602	12.67	36,57,74	6.75
District Board Rail- ways	521	1.43	2,54,12	0.47
	<hr/> 36,333	<hr/> 100.00	<hr/> (1) 541,79,90	<hr/> 100.00

(1) Appendix 4 to Railway Board's Administration Report Vol. II for 1917-18.

But by the working arrangements, the mileage of the Indian Railways was distributed under the following administrations;—

	Miles.
1. Government Administrations ...	8,524.76
2. Durbars of Indian States ...	2,741.45
3. Agency Companies ...	22,026.33
4. Owning Companies ...	3,040.93
	<hr/> 36,333.47

Although 26,183 miles or 72.06 per cent., of the total length of the railways in India belonged to the British Indian State, only 7,112 miles equal to 27.16 per cent., of them were worked by the State itself, while 19,071 ⁽²⁾ miles equal to 72.84 per cent., were leased to Companies for working purposes. The working Administrations and the railways worked by them are given in Appendix No. 16.

The Government Administrations had their three main systems under the Central Government and one small line under the Local Government of Assam as noted below:—

	Miles.
North-Western System ...	5,226.11
Oudh and Rohilkhand System ...	1,541.81
Eastern Bengal System ...	1,724.34
Assam Administration ...	32.50
	<hr/> 8,524.76
These were made up of—	
State Railways	7,112.07
Indian State Railways ...	313.86
Branch Companies' Railways ...	1,066.79
Subsidized Railways ...	32.04
	<hr/> 8,524.76

(2) Includes 124 miles worked by the J. E. Railway.

Total (a) and (b) ...		20,222·31
(c) <i>Company Guaranteed by an Indian State.</i> —		
9. Nizam's Guaranteed Railway Company	896·34	
(d) <i>Subsidized Companies Working State Railways jointly with their own lines:—</i>		
10. B. & N. W. Railway Company	2,128·17	
11. Rohilkhand & Kumaon Railway Co.	610·01	
(e) 22 Minor Companies Working their own Rys:—	1,210·43	
Total Mileage worked by Companies		25,067·26

From the year 1880, Companies under clauses (a) to (d) have been specially encouraged; and on the 31st March 1918, the eleven Companies, worked a total mileage of 23,856·83 miles of the following different classes of railways; as shown under heads III to V in Appendix 17.

		Open mileage.
II. State Railways	18,947·39	
IX. District Boards' Railways	214·14	
XII. Indian State Railways	1,530·37	
IV, V } VI & } XIV }	Branch Companies' Railways	698·04
VI. Subsidized Companies' Railways	1,745·63	
XIII. Company guaranteed by an Indian State	721·26	
		23,856·83

The first eight companies are mere agents of Government for the working or construction and working of State Railways. The ninth is a company guaranteed by His Exalted Highness the Nizam's State; it works also a railway belonging to the British Government.

The remaining two are subsidized companies, to whom the privilege of working State Railways along with their own lines has been extended since the recommendation of the Select Committee of 1884 was made. It is very desirable that the contracts

of these ten companies working State Railways should be terminated as early as possible. Under the existing contracts, their leases are terminable on the dates given below:—

1. E. I. Railway on 31st December 1924 or at the end of any fifth succeeding year.
2. A. B. Railway on 31st December 1921.
3. G. I. P. Railway on 30th June 1925.
4. Burma Railway on 31st December 1928.
5. B. & N. W. Railway on 31st December 1932.
(Contract for Tirhut State Railway)
6. R. & K. Railway 31st December 1932.
(Contract for Lucknow-Bareilly State Railway)
7. M. & S. M. Railway 31st December 1937.
8. B. B. & C. I. Railway 31st December 1941.
9. S. I. Railway 31st December 1945.
10. B. N. Railway 31st December 1950.

The financial responsibility of the companies as working agents is *nil*. They have no funds of their own to meet any losses or expenses. Their contracts do not require them to make up any losses. Whatever losses do occur on the railways, they are debited to the Revenue account of the railways. They defray all expenses from the gross earnings of the railways themselves; the expenses include labour and stores, salaries of staff, expenses of their Home Board Offices, contribution to the Provident Fund. After meeting all such expenses, net earnings are obtained, from which the guaranteed interest on the companies' capital is paid and the residue goes to Government. Should this residue amount to over a certain percentage on the capital cost of Government, such excess is treated as surplus profits, in which the Government and the companies share in various proportions as laid down in each company's contract. The proportions are noted below:—

an unusual
a fund set
in a way
unusual
means

Govt. Share, Coy's Share.

1. East Indian—			
Profits upto 25 Lakhs	...	...	$\frac{1}{2}$
" in excess beyond 25 lakhs...	...	...	$\frac{1}{5}$
2. G. I. P. ...	...	...	$\frac{1}{20}$
3. B. & N. W. on account of Tirhut State Railway—			
(a) upto 10 Lakhs	...	...	$\frac{1}{2}$
(b) Excess beyond 10 Lakhs	...	...	$\frac{1}{5}$
4. Bengal-Nagpur	...	...	$\frac{1}{2}$
5. Burma Railways Extensions	...	...	$\frac{1}{2}$
6. South Indian	...	...	...
7. B. B. & C. I.	...	...	...
8. M. & S. M.	...	...	...
9. R. & K. on account of Lucknow Bareilly State Railway	...	...	In proportion to the Capital subscribed by each.
10. Assam-Bengal	...	...
11. Burma	...	...

Particulars of the railways administered by the Companies are given in Appendix No. II, which are supplemented by the remarks in the following paragraphs:—

The East Indian Railway.—Under the new contract entered into with the East Indian Railway Company in 1880, the capital sum representing the deferred annuity, viz., £6,550,000 has been left in the hands of Government to be regarded as the capital of the reconstituted company, on which they receive 4 per cent. interest per annum plus one-fifth* of the yearly net profits made by the Railway.

The following payments are made out of the gross receipts of the Railway each half-year, viz:—

1. Interest upon the debenture stock of the Company in existence on the 1st of January 1880 and upon the debentures of the Company outstanding on that day;

* The company's share of surplus profits was subsequently revised as shown in item 1 above.

2. The charge in respect of so much of the annuity of £1,473,750 as is not deferred and which with the deferred one-fifth amounted to £1,179,000;
3. Payment of interest at 4 per cent. per annum on the capital sum represented by the deferred portion of the annuity;
4. Interest on the Capital Advance Account and the Capital Account;
5. Interest on the value of stores in hand;
6. Contribution to the Provident Institution;
7. Surplus profits.

This arrangement was made for 50 years from the 1st January 1880, subject to determination at the end of the 20th and any subsequent 5th year, on giving notice of two clear years. Under a subsequent contract dated 14th November 1899, the Government and the Company agreed mutually not to determine the contract dated 22nd December 1879 before the 31st December 1919. On that date or at end of any succeeding 5th year thereafter, either party might determine the contract by giving two years previous notice. In 1919 the Company was allowed a further extension, the terms of which have not yet been published by Government.

The Indian Midland Railway Company was formed in October 1885 to take over the working of the Sindhia State Railway, 76.49 miles from Agra to Gwalior, which was originally opened on 10th January 1878, and to construct and work certain new lines on behalf of the Government of India. The railways were to remain the property of the Government; but the Company was to find the capital cost, upon which the Secretary of State for India guaranteed interest at 4 per cent. per annum, together with one-fourth share of the surplus profits made by the railway after meeting the working expenses and the guaranteed interest.

The Company took over the working of the Bhopal-Itarsi Railway also, 10.80 miles of which belong to the Government of

India and 45.45 miles to the Bhopal State, from 1st January 1889, the terms for which were recorded in Appendix J, Part II of the Railway Administration Report for 1891-92 and in contracts dated 17th February 1890 and 20th April 1894. Those for the transfer of the Sindhia State Railway are to be found in Appendix H to Part II of the Administration Report for 1890-91 and in contract dated 18th March 1890.

This Company's system comprised of the lines from Bhopal to Agra city with branches to Cawnpore, Manikpur, Katni, Baran, etc.—a total of 811.58 miles, now styled as Midland Section of the G. I. P. State Railway System:

The I. M. Railway is being worked as a part of the G. I. P. Railway system under the Company's contract dated 21st December 1900, when the lines of the two late companies were amalgamated under a mutual agreement.

Upon termination of the I. M., Railway Company's contract on 31st December 1910, Government repaid to the I. M. Ry. Company, the actual sums which had been paid by the Company under clauses 32, 34 and 58 of the contract dated 2nd October 1885.

SECTION 3.—Railway Functions.

There are five distinct functions in connection with railways,
viz:—

- (1) Ownership,
- (2) Construction,
- (3) Working and maintenance,
- (4) Direction,
- (5) Governance,

1. Ownership carries responsibilities for the provision of funds and the title to profits or liability for losses arising from

the railway. In the case of Government railways, the ownership of the Government is absolute. Similarly in most of their railways, the Indian States have their permanent ownership.

The ownership of the companies in their own lines is limited to a certain term of years, at the end of which the Government of India or the Local authorities have the right to acquire their railways on certain specified terms, in consideration of the assistance allowed by the Government to the companies, or in the interests of the general public. In this connection Lord Ripon's Government made the following recommendation :—*

"66. It remains to be considered whether power should be reserved to the State to purchase the railways, whether those made by unaided or by aided private enterprise. We think that, on the whole, such power had better be reserved. A railway will often constitute a natural monopoly, and, if the monopolists abuse their position, it may be in the interest of the community that the State should have the power to purchase their property not necessarily with a view to keeping it in the hands of Government, but more probably with a view of selling it again under different conditions. The conditions of purchase as well as the time after which the right can be exercised, might form the subject of negotiation in each case. As regards the period, 30 years seems to us to be a suitable term. As regards the conditions we think that they might form the subject of negotiation in each case, but we may say that we would not insist on too favourable terms." As will be shown hereafter, Lord Ripon's Government was extremely partial to companies and these terms were proposed to further their interests and have been followed since. The terms concluded with each Company are noted in appendices II to XIV.

Function 2.—The construction of railways includes the building of lines, bridges, works, etc., whether executed departmentally or by contract, as also the provision of rolling-stock, especially

* Para 66 of Government of India letter No. 29 Financial, dated 23rd January 1883 to the Secretary of State for India (Page 520 of Report of Select Committee of 1884).

where a line is worked by the owning administration. In the case of branch lines worked by the main line on the Rebate Terms,* the necessary rolling-stock is generally provided by the working agency, *on the basis of the necessary rolling-stock* where the branch line is of the same gauge as the main line.

The Preliminary work and the construction of line, bridges and works are executed by Civil Engineers under the control of a Chief Engineer or an Engineer-in-Chief. Locomotives, Carriages and Wagons are built in the workshops which are in charge of Mechanical Engineers. In the early days the Indian railways obtained from England, all the iron-work including rails, sleepers, fittings, tools and plant, machinery, etc., as also locomotives and vehicles in pieces which were erected in the Locomotive and Carriage and Wagon Workshops provided on each railway for this purpose and for executing the necessary repairs and renewals of parts of rolling stock. This system continued generally till about the year 1895, when the long delays and extra costs incurred in consequence of the Engineers' strike about that time in England, set the Indian authorities about to arrange for the manufacture of engines and rolling-stock in India, where labour was very much cheaper, the railway workshops in India needing only some extra machinery from England and raw material such as iron and steel sheets, rods, channels, angles, etc. Some of the Indian railways were quick enough to make arrangements accordingly and have been building their engines and vehicles entirely in India. Since then several Engineering firms have established their workshops in Bombay, Calcutta, etc., and undertake the construction of railway rolling-stock, while iron and steel are largely manufactured in the Tata Ironworks at Sardhi. *Still India has to obtain a large quantity of machinery and ironwork from England, America, Belgium, etc. These requirements are obtained for the State-worked railways through the Director General of Stores in England and, for the Company-worked railways, through their Boards of Directors in London. A new Department of Stores has recently been proposed for India, as explained in section 2 of Chapter II herein.*

See Chapter VI, Section 6 (d) herein.

The expenditure on the construction of railways is charged to the Capital Account.

The construction of railways in India has been variously performed in the several classes of railways. As regards the State Railways, some of them were originally constructed by Companies and were subsequently either acquired by Government or were surrendered by the companies to Government as unprofitable concerns. Of the others, some were constructed by the direct agency of Government, while the rest of the State Railways were constructed through the agency of Companies. So far the vast majority of the Indian States have not established their own departments for constructing their railways. They have got their railways constructed either through the agency of the main lines concerned, or through officers obtained on loan from the Government of India. The Governments of their Highnesses the Maharajas of Baroda and Mysore have recently started Engineering Departments of their own. With the exception of some of the Branch Railway Companies whose lines have been constructed by the main line agency, most of the companies have had their lines constructed by their own staff.

As a general rule, the owners should have this work carried out by staff employed under their own control.

Function 3.—The Working of a railway ordinarily includes the general management, the running of trains for the carriage of passengers, goods, live-stock, etc., the maintenance and up-keep of the line, works, rolling stock, etc., and the services connected therewith. The working expenses are charged to the Revenue Account and cleared annually. This function is variously performed by the different classes of railways. The owning bodies do not, in many cases, work their own lines, whilst most of the biggest companies are mere agents for the working of State and other railways. The old Guaranteed Companies worked their lines themselves during the whole period of their existence from 1853 to 1907. Similarly many of the companies, which have been formed since the year 1879, work their lines under their own management.

Even some of the Branch Companies, coming under the Rebate Terms, which might have entrusted the working of their railways to the main line administration, have kept the working in their own hands. Among these companies are the Darjeeling-Himalayan and the Gujrat Railways Companies.

The State Railways began well, being worked by Government themselves, but after a decade of successful working, a reaction set in, in favour of companies whose business is the exploitation of India. Some of the members of the India Office thought that the working of railways was a commercial concern, and that it threw too much work on the Government of India; and it ought, therefore, to be handed over to companies. That these views were wrong and highly prejudicial to the interests of India, will be shown later on.

The advocates of the companies were and are still very powerful and they have carried the day. The best of the State Railways have been leased to British Companies, who work them as agents of Government at the cost and risk of Government, the Companies sharing in profits only.

Function 4.—Under this head may be put (1) the Boards of Directors in the case of companies which, with the exception of a few Branch Railway Companies whose Directors sit at Bombay, Calcutta and Karachi, are located in London; and (2) the Indian Railway Board or Government Administration in the case of State Railways. The Indian Railway Board was established in 1905. Formerly the administrative work of State Railways was conducted by the Government of India in the P. W. D., through the Local Governments from the commencement of State Railways in 1868.

In 1871, the control of the State Railways in Northern India was taken away from the Local Governments of Bengal, the N. W. Provinces (now the United Provinces of Agra and Oudh), and the Punjab, and placed in the hands of the Government of India. A Director of State Railways, who was immediately under the Government of India, was appointed in the same year. In 1877 his office was divided into four Directorates, which were

reduced to three in 1879. The latter were merged into one Director-General for all Railways in India in 1880, whose office was amalgamated with the Government of India Secretariat in 1897 and separate Directors were appointed for Railway Construction and for Railway Traffic, who continued till 1905, when the present Railway Board was instituted. We propose to deal further with this matter in Chapter II.

Function 5.—Governance.—This head embraces those functions which the State exercises over all classes of railways, whether belonging to the State or to private parties. Such functions refer to law and order, safety of the public, regulation of traffic, rates and fares, privileges of Government secured under the contracts and agreements with the owners of the railways.

In the concluding sentence of his Minute of July 1850, Lord Dalhousie wrote: "I trust the Government of India will ever avoid the error of viewing railways merely as private undertakings, and will regard them as national work, over which the Government may justly exercise, and is called upon to exercise, a stringent and salutary control. This control should not be an arbitrary right of interference, but a regulated authority, defined and declared by law, which is not to be needlessly or vexatiously exacted, but which in my humble judgment is necessary at once for the interests of the State and for the protection of the public"●

Section 7 (1) of the Indian Railways Act No. 1X of 1890, pre-supposes that a contract must be entered into with the Government by a company desiring to acquire the right to construct a railway, and Section 16 of that Act expressly requires the sanction of the Governor-General in Council before a railway administration can use upon a railway locomotive engines or other motive powers and rolling-stock.

Under Section 4 of the Act the Governor-General in Council has appointed certain officers as Inspectors of Railways, who see from time to time to the safety of the public and fitness of the rolling-stock used upon the railways.

Under Section 47 of the Act, every railway administration is required to make general rules for the working of the railway, including the provision for the accommodation and convenience of passengers and carriage of their luggage, the conduct of railway servants, and generally for regulating the travelling upon, and the use, working and management of railway.

Instead of each railway framing these General Rules for itself as required by the Act, all the Railways have jointly adopted a set of General Rules at the sittings of the Indian Railway Conference Association. Whenever a new railway comes into existence or an addition or alteration is made in the existing General Rules, such new railway or all the railway administrations apply individually for sanction for the adoption on their railways, of the General Rules or additions or alterations to the same, as the case may be; and the sanction then given by the Governor-General in Council is notified for general information in the *Gazette of India*.

Thus the General Rules for the working of railways have the force of law under Section 47 of the Act.

The Indian Railways Act needs important modifications. It should be brought in line with the English Railway and Canal Traffic Act, especially in respect of Rates and Fares, as shown in Chapter VII.

The rules and orders as to rates and fares laid down by the Government of India in their administrative capacity, for the guidance of the State Railways and of the Railway Companies over which they have the necessary control, under the terms of their contracts, will be dealt with in detail in the same Chapter, as the matter is of as much importance to the public as to the railway administrations.

For the carriage of their own traffic, viz :—

- Mails and Postal officials,
- Troops and their Baggage,
- Military Stores,
- High Officials of Government,

the Government of India have laid down special rates and conditions for the State Railways and the same conditions are applicable generally to the State Railways worked by the Agency companies and to the lines of other companies, over which the Government have reserved these privileges in the contracts.

In the case of railways belonging to the Indian States, these conditions do not apply, unless specially agreed to by the States.

SECTION 4.—Chronological order of Railways.

The various classes of railways in India came into being and continued their operations during the years noted below:—

(a) Railways in British India.

Old Guaranteed Railways.—Nine companies were formed and contracts were concluded with them between the years 1849 and 1870. Their operations continued till the end of 1907.

2. *First Subsidized Companies.*—Two of them were informally formed about the year 1863, viz:—The Indian Branch Railway Company and the Indian Tramway Company. They were subsequently converted into Guaranteed Companies, the former surrendering to Government in 1872, the Nalhati Railway which had been completed without guarantee.

3. *State Railways constructed and worked by the direct Agency of Government.*—This policy was adopted in 1867 and was vigorously and exclusively pursued till 1880. From that year it has been checked and is carried on to a small extent.

4. State Railways provided by the Provincial Governments from 1869.

5. Railways provided by the Port Trusts of Calcutta and Bombay, open from 1875 and 1915 respectively.

6. Railway Companies subsidized by the Local Governments. Two of these were formed in 1879 and 1880 respectively.

7. *Companies subsidized by the Government of India.*—The first of them was started in 1881. Twenty-one companies were formed up to 1913, of whom nine have been purchased by Government

and twelve still own their lines, six working the lines by their own staff and six others being worked by the main line administrations.

8. *Agency Companies*.—Companies acting as agents of Government for working State Railways already constructed and successfully worked by Government, or State Railways acquired by Government from old companies; and for constructing and working new lines of State Railways on behalf of Government, in some cases raising the capital on the guarantee and responsibility of Government. Eight Companies of this description have been formed from 1879 to 1908, who worked 20,222·31 miles of railways open for traffic on 31st March 1918. The Government of India sometimes styled them as “Construction and working companies.”

Since the introduction of the policy of employing these companies, two of the Subsidized companies mentioned in clause 4 above, have also secured the working of 1,198·95 miles of State Railways mostly constructed and formerly worked with profits by Government.

Taking advantage of the example set by the Government of India, another company managed in 1883 to obtain the working of His Exalted Highness the Nizam's State Railways and with an extraordinary guarantee of 5% when the market rate of interest in England for Indian loans was 3 or 3½ per cent. per annum.

9. *Railway Companies subsidized by District Boards*.—Eight of these were formed between 1891 and 1913.

10. *Companies on Rebate Terms*.—These were introduced by the Government of India in 1893. Twenty-three companies were formed between 1895 and 1916, of whom 18 had their lines open and 5 under construction on 31st March 1918. Of the former only two worked their own lines, while the lines of the others were being worked by the Main Line Administrations.

11. *District Board Railways*.—Five of these were opened between 1894 and 1917, and three others were under construction on 31st March 1918.

12. *New Guaranteed Companies.*—Only two of these Companies were formed, one in 1897 and the other in 1913.

13. *Railway Companies under Guarantee and Rebate Combined.*—Only one Company of this description was formed in 1915, whose line was partly opened in 1917. This Company comes under the Rebate Terms as modified in 1913.

(b) *Railways belonging to or Guaranteed by Indian States.*

14. *Indian State Railways owned by the States but worked by other administrations.*—257·81 miles of open lines were worked by the British Government Administrations, 1324·65 miles of open lines were worked by Companies. 299·02 miles were under construction by main lines. The first of these lines was opened in 1873.

15. *Indian State Railways owned and worked by the States.* There were 17 of these with 2,478·80 miles open for traffic and 412·91 miles under construction. Two of these lines were opened in 1880.

16. *Companies' Railways Guaranteed by Indian States.*—There were three of such lines; the first one was originally constructed and worked by the British Government from 1874 to 1884, when it was acquired by the Company, with a guarantee from the State of 5% on the Company's Capital.

(c) *Railways in Foreign Territories.*

17. There were three Branch Railways, owned by British Companies and worked by the Main Line Companies, 73·60 miles of open lines. The first line was opened in 1879.

SECTION 5.—Working Administrations.

The total number of Railway Administrations in India from the commencement to the 31st March 1918 (excluding the separate managements of State Railways formerly worked independently, which have been subsequently abolished or merged into the main lines or leased to companies) were as detailed below:—

Administrations.	Open Lines.	Lines under construction.	Purchased by Government.	Working administrations.	Worked by Main Lines.
1	2	3	4	5	6
Old Guaranteed Companies.	9	...	9	...	...
" Subsidized "	2	...	2	...	...
State Railways ...	3	...	...	3	...
Provincial State Railway...	1	...	...	1	...
Agency Companies ...	8	...	...	8	...
Indian States' Administra- tions ...	37	...	...	11	26
Companies Guaranteed by Indian States ...	3	1	...	1	3
Companies Subsidized by Indian Government.	21	...	9	6	6
Companies Subsidized by Local Governments.	2	...	...	2	...
Companies Subsidized by District Boards ...	8	...	...	8	...
District Board Railways ...	5	3	...	...	8
Companies on Rebate Terms	21	5	...	1	25
Companies on Rebate & Guarantee ...	1	...	...	...	1
Companies on New Gua- rantee ...	2	...	...	1	1
Unassisted Companies ...	5	1	...	6	...
Companies' lines in Foreign Territories ...	3	...	...	...	3
Port Trusts ...	2	...	...	2	...
Total ...	133	10	20	50	73

As shown above in Column 5, there were 50 working

administrations in India in 1918, viz :—

Government administrations	4
Agency Companies' administrations	8
Indian States' Administrations	11
Company Guaranteed by Indian State	1
Companies Subsidized by Indian Government	6
" " " Provincial Governments	2
" " " District Boards	8
" on Rebate Terms	1
" under New Guarantee	1
" unassisted	6
Port Trusts	2
Total	50

Altogether 92 railway companies were formed during the period from 1849 to 1918. Twenty of them ceased to exist, as their undertakings were acquired by Government: Seventy-two companies were still in operation. They are classified as follows :—

Agency Companies	8
Companies Subsidized by Government of India	12
" " " Local Governments	2
" " " District Boards	8
" on Rebate Terms	26
" on Rebate and Guarantee	1
" on New Guarantee	2
" in Foreign Territories	3
" unassisted	6
" guaranteed by Indian States	4
Total	72

By employing the Companies, the Government have had to give pecuniary assistance in one form or another. To make up a certain rate of return on the capital expenditure on the railways promoted by the companies, the Government had to contribute in several forms, viz :—

- (1) Cash guarantees.
- (2) Cash payments for land given free to Companies.
- (3) Cash Subsidies.
- (4) Cash Rebates from Main Line Earnings.
- (5) Cash Subsidies from District Board Funds.

Almost all the railways in India promoted by Companies have been allowed Government assistance. In the case of the old Guaranteed Companies, a high rate of interest was allowed, whereas in the case of the State Railways constructed by the direct agency of Government, capital was obtained on lower rates of interest than those paid through Companies, old or new.

So far there is hardly any independent enterprise among the Indian Railway Companies. We have only 76 miles of railway provided by unassisted enterprise, which is very insignificant on the total of 36,333 miles. The old Guaranteed Companies operated from the year 1849 to 1908. Fortunately they have now disappeared, but they have left successor Companies, who are still ruling supreme in the railway administration of India to the detriment of India and Indians. Soon after a check was placed upon the operations of the old Guaranteed Companies, and the sound system of State Railways under the direct management of Government was well established, the capitalists of England raised the cry that the Government was engaged in commercial enterprise which ought to have been left to companies. The capitalists had as they have even now, great influence with the powers and they carried the day and got new Companies into the railway field of India. The reintroduction of the Companies is very unfortunate for India. The whole country has been working to get rid of them, but all efforts in that direction have been in vain. The Secretary of State has now appointed a Committee of Enquiry to consider and make recommendations about, (1) The different methods of management for the State Railways of India; (2) the functions, status and constitution of the Railway Board; (3) Arrangements for the financing of Railways in India, and the feasibility of greater utilization of private enterprise and

capital in the construction of new lines; (4) The present system of control by Government of rates and fares, and machinery for deciding disputes between railways and traders.

The matter was well discussed several times in the Legislative Council, enquiries were also made by the Railway Board and ample facts were before the Government, upon which a decision could have been arrived at. But the Government did not take the responsibility; they might well have left it to the verdict of the new Legislative Assembly and the Council of State. They have appointed a Committee consisting of ~~six~~^{seven} European and three Indian members. This is not at all fair. Without in the least questioning the impartiality of the members, we think Government should have allowed a majority of Indians on the Committee, considering that the matter affects the people of India more vitally than any other people. We will, however, watch the proceedings of the Committee with utmost interest. In the subsequent Chapters we propose to give fuller details about the Indian Railway Companies.

SECTION 5.—Capital account of State Railways.

Heads I and II in Appendix 4 to Volume II of the Railway Board's Administration Report for 1917-18 gave the Capital *Outlay* on the State Railways upto 31st March 1918 in thousands of rupees as under :—

		Open Lines.	Lines under construction.
Total of final heads	...	4,61,42,52	3,52,30
Ferries, etc.	...	2,67,26	...
Suspense (stores not charged off)	...	11,65,54	4,92
		<u>4,75,75,32</u>	<u>3,57,22</u>
			4,79,32,54
Unclassified Expenditure	...		53,25
			<u>4,79,85,79</u>
Total	...		

	Pounds.
Equivalent in sterling	(a) 352,587,000
<i>Deduct</i> —Outlay on the following lines which were not among the State Railways:—	
South-Bihar Railway	798,000
Travancore State Section of Tinnevely-Quilon Railway	1,116,000
Total ...	350,673,000

Thus the total Capital Outlay on the British Indian State Railways upto 31st March 1918 was £350,673,000.

Appendix 5 to the same Report, however, gave the Capital *Liability* on account of the State Railways on the same date at £367,438,689 detailed under the following heads:—

1. Balance of share Capital of purchased railways which was being paid off by annuities	Pounds. 66,817,518
2. State Outlay	187,478,418
3. Debt incurred for purchase of railways	49,290,378
4. Share capital of Companies working State Railways	18,070,289
5. Debentures & Debenture stock of Companies working railways (b)	42,930,448
6. Overdrafts by the Companies	—106,597
7. Advances by Government to the Companies	2,958,235
Total ...	367,438,689
<i>Deduct</i> figures against the Travancore State Section of Tinnevely Quilon Railway ...	461,557
Total ...	366,977,132
	= Rs. 5,50,46,56,980

(a) Foot Note 1, at page 14 of Vol. II of the Administration Report for 1917-18 stated that in certain cases, the Sterling Capital had been taken as originally expended, in others the rupees had been converted at Rs. 15 = £1.

(b) On the issues of these Debentures and Debenture Stock, there was a net charge (discount) of £1,134,608, which was shown but not taken in the total of the Administration Report.

The Finance and Revenue Accounts of India for the same year gave the figures in several accounts, which when put together worked up to a total of £390,870,169 as noted below :—

1. Capital Expenditure on construction of

Railways as per Account No. 74 :—

	Pounds.	Pounds.
Charged to Revenue ...	10,431,096	
Not charged to Revenue...	198,286,839	
		<hr/> 208,717,935
2. Capital charge involved by incurring specific debt in purchase or in the redemp- tion of liabilities as per column 19 of Account No. 73 ...	60,502,103	
Less.—India stock redeemed by Sinking Funds ...	4,972,835	
		<hr/> 55,529,268
3. Balance of Capital obligations being discharged by An- nuities, Account No. 74 J.		66,817,518
4. Share Capital and Debentures etc., for Indian Railways raised through Compa- nies on guarantee of Go- vernment, as per Finance Accounts II B & C in Appendix E ...		59,805,448
Total ...		<hr/> 390,870,169

Items 1 & 2 above largely differ from items 2 & 3 on page 25. To make out a complete statement of the Capital Account of the State Railways, the following items should be taken :—

Total as per Finance and Reve- nue Accounts ...	Pounds. 390,870,169.
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Add.—Sums paid out of Revenue in discharge of Capital obligations, *viz*:—

(1) Capital paid off by Annuities Account 74 J. ...	Pounds. 15,026,647
(2) India Stock redeemed by Sinking Funds ...	4,972,835
(3) Discount redeemed by Discount Sinking Funds, <i>vide</i> item d(iv) under Finance Account No. 82	93,936
Total	<u>410,963,587</u>

= Rs. 6,16,44,53,805

Thus the total capital cost of the State Railways was £410,963,587, of which £59,939,448 was subscribed by, or raised through, the Agency Companies, as shown below:—

Share Capital	18,075,000
Debentures and Debenture stock ...	41,730,448
Loan from Provident Fund ...	134,000
Total	<u>59,939,448</u>

The Companies run no risk in connection with this Capital, as the whole has been raised on the guarantee of the Government.

The liabilities incurred on the purchase of the B. B. & C. I. Railway were as follows:—

	Pounds.
Debentures taken at par	2,391,300
Purchase price for Share Capital of £8,745,056 ...	11,685,581
The latter was discharged by—	
Issue of New Company Stock for	2,000,000
Issue of 3% India Stock in satisfaction of the balance of £9,685,581 ...	10,089,146

Thus the Capital obligations on account of the old B. B. & C. I. Company were as under:—

	Pounds.
Debentures	2,391,300
3% India stock	10,089,146
New Company Stock 3%	2,000,000
	<u>14,480,446</u>

These sums fully appeared in Appendix 5 to the Administration Report, whereas the sum of £12,480,446 appeared in Account No. 74 H, and the two millions of the Share Capital in Account No. II B of Appendix E to the Finance and Revenue Accounts.

Account No. 74 A showed the following items which had been subsequently contributed by the new B. B. & C. I. Railway Company:—

	Pounds.
Debenture Stock... ..	1,000,000
Loan from Provident Fund	134,000
	<u>1,134,000</u>

These sums were also shown in the Administration Report.

The premium paid to the old B. B. & C. I. Railway Company came out to £3,344,090 as under:—

	Pounds.
Share Capital	8,745,056
India Stock and New Company	
Stock issued	12,089,146
Premium	<u>3,344,090</u>

Whereas page 15 of the Administration Report, Vol. II for 1917-18 showed it at £4,135,280.

The contributions by the individual Companies were given as follows in columns 11, 13, and 15 of Appendix 5 of the Railway Board's Administration Report, Vol. II for 1917-18, and in Accounts II B and C in Appendix E to the F. and R. Accounts:—

	Share Capital Pounds.	Debentures and Debenture Stock. Pounds.
East Indian ... ..	...	18,500,000
South Indian	1,000,000	3,328,248
G. I. P.	2,575,000	3,500,000
B. B. & C. I.	2,000,000	1,000,000
M. & S. M.	5,000,000	4,825,000
Bengal-Nagpur... ..	3,000,000	7,874,300
Assam-Bengal	1,500,000	905,900
Burma	3,000,000	1,250,000
R. & K. (Lucknow-Bareilly)	...	547,000
	<u>18,075,000</u>	<u>41,730,448</u>

The Capital Account of the State Railways amounted to £366,977,132 according to the Railway Board's Administration Report, and to £390,870,169 according to the Finance and Revenue Accounts; while we make out a total of £410,963,587 as shown on page 27. The Public Debt of India on 31st March 1918 amounted to £350,343,494, of which—

£113,385,919 was in India and

£236,957,575 in England.

Of the total debt, that classed for Railways, amounted to £239,146,143. It was made up of the following:— Pounds.

Capital Outlay on State Railways	182,448,839
Specific Debt £60,502,103	
Less.—India Stock redeemed by	
Sinking Fund 4,972,835	
	<hr/>
	55,529,268
Advances to District Boards	137,906
„ to Companies	458,234
Discount involved in raising	
money for purchase of Guarantees	
Railways £665,832	
Less amount redeemed by Discount	
Sinking Fund 93,936	
	<hr/>
	571,896
	<hr/>
Total	239,146,143

Account No. 82 in the Finance and Revenue Accounts put the whole of the Capital Outlay on the State Railways as met from loans, but in Account No. 73 the following items were shown as “charged against Revenue”:—

1. Railways provided from Famine Insurance	Pounds.
Fund	5,248,088
2. Preliminary Expenses on Surveys, etc.	
(Head H 41)	1,046,527
3. Frontier Railways and other Railways provided out of Revenue (Head G, 37)	4,136,481
	<hr/>
Total (a)	10,431,096

(a) Besides the sum of £10,431,096 charged to Revenue of India for

The debts included in the Railway debt comprised the following:—

	Pounds.
4½% Loan from Indore State	666,666
4 % " " Scindia "	1,000,000
4 % " " Rampur "	313,333
4 % " for Muttra-Hathras and Cawnpur-Achnera Rys.	527
Debenture Stock 4½% of E. I. Ry.	1,435,650
" " 4 % of E. B. Ry.	348,666
" " 4½% of S. I. Ry.	425,000
" " 4 % of G. I. P. Ry.	2,701,450
Specific Debt	55,529,268
Nagda-Muttra Railway Loan from Jaipur Durbar, Account 79 A.	566,667
Public Loans	176,158,916
Total	239,146,143

The following obligations should be added to the above total:—

- (1) Loans raised through E. I., S. I., G. I. P.
and B. B. & C. I. Companies as per
Account No. 74 A. 26,462,248
- (2) New Company Stock of S. I., G. I. P.,
B. B. & C. I., and Madras Rys. 7,075,000
- (3) Share Capital and Debentures, etc.,
of A. B., B. N., Burma, R. & K.,
and new M. & S. M. Companies,

Construction of Railways, the Revenues had borne also the following Capital charges:—

Portion of Capital discharged by Annuities as per Account No. 74 J	Pounds.
Specific Debt discharged by Sinking Funds	15,026,647
Discount discharged by Discount Sinking Fund as per foot-note d (iv) to Account No. 82	4,972,835
	93,936
	20,093,418

as per Accounts Nos. II B & C of	Pounds.
Appendix E to F. & R. Accounts ...	27,901,300
(4) Balance Capital being discharged by	
Annuities, Account No. 74 J. ...	66,817,518
Total ...	128,256,066

This would raise the Railway debt to ... 367,402,209

The Capital obligations incurred on the purchase of the Guaranteed Railways, which are being discharged by Annuities, *vide* Account No. 74 J, are a kind of public debt against India. As such they might be included in Finance and Revenue Account No. 82. As, however, they are not there, public are liable to overlook them in forming a correct idea of the public debt of India. They are neither included in Account No. 73 or 74, which show the Capital account of the State Railways. Account No. 74 J, is however included in Section N—"Capital not charged to revenue."

We have so far taken the figures found in the Railway Board's Administration Report and the Finance and Revenue Accounts of India for the year 1917-18. But neither of those publications give the total outlay incurred by the State from the *Revenues* of India on Indian Railways from their commencement. We have collected those figures in Statement No. 8, appended to this volume, taking the summary from 1848-49 to 1882-83 from the Report of the Select Committee of 1884, and the subsequent figures from the Annual Finance Accounts of the Government of India. That Statement shows the following totals from 1848-49 to 1917-18:—

1. Net loss on account of the Guaranteed	Rs.
Railways	58,07,24,409
2. Advances to Subsidized Companies ...	42,64,119
3. Outlay on Surveys, etc.	2,56,09,711
4. Outlay on railways from the Famine	
Insurance Fund	7,15,23,609
5. Outlay on railways constructed out of	
revenues of India	6,76,91,859
6. Loss by Exchange upto 1882-83 ...	1,00,30,070

7. Interest on outstanding balances	...	2,97,69,17,629
Total	...	3,73,67,61,406
8. Deduct net profits from State Railways		72,08,59,915
Net Balance	...	3,01,59,21,491

Of the above, items Nos. 3, 4, 5 and 6 amounting to Rs. 17,48,55,249 have been included in the Capital Account of the State Railways,* the balance of Rs. 2,84,10,66,242 is debitable to capital, which, together with the Rs. 5,50,46,56,980 as per Administration Report or Rs. 6,16,44,53,805 according to the Finance Accounts, would make up a total of Rs. 8,34,57,23,222 or Rs. 9,00,55,20,047 in the Capital Account upto 31st March 1918.

If the Railways were truly treated as a commercial concern, every rupee laid out on them whether from revenue, or from borrowed funds, should be taken to account. From this point of view our Statements Nos. 3A and 8 show a correct account of the financial results to the State from its Railway concern.

It may not be desirable to increase the Capital account so largely, but it is essential that the people should know the total costs incurred. It is also necessary for practical purposes, since the surplus profits are distributed between the Government and the working Companies in proportion to the Capital provided by each. For such transactions, full costs actually incurred by the State should be taken, instead of the capitalised value, based on the net earnings of the railways as recommended by the Committee on Indian Railway Finance in 1908, *vide* Chapter VI, Section 5 herein.

SECTION 6.—Importance of Railways.

The importance and economic value of the Indian Railways are not generally realized. The Finance Accounts give the top place to Land Revenue on the Revenue side and to Military services on the Expenditure side, but the top place is virtually due to the State

*Accounts Nos. 73 and 64 in the Finance and Revenue Accounts of India for 1917-18.

Railways on both sides of the Government account. The accounts as they are prepared take the *gross* Revenue from Land but *net* Receipts only from the Railways, after deducting the Working Expenses of Railways and the surplus profits paid to Railway Companies. On the expenditure side these two items are not at all shown. Taking like figures for both Railways and Land, the General Account of the Revenue and the Expenditure charged against Revenue of the Government of India for the year 1917-18, in India and in England stood as follows:—

			Revenue. Pounds.	Expenditure. Pounds.
Land	...	...	21,607,246	3,782,276
Railways	...	...	46,041,507	86,127,184
Military	...	...	1,720,509	30,763,650
Other heads	...	...	65,192,884	55,801,962
Total			134,562,146	126,475,072

Besides the Revenue expenditure of £36,127,184 on the Railways, there was a further outlay of £3,571,464 on State Railway Capital *not charged to Revenue*. Thus the total State expenditure on the Railways during that year was £39,698,648 against £30,763,650 of the Military services.

The corresponding figures for the year 1919-20 were as under:—

			Revenue.	Expenditure.
Land	...	...	22,609,943	4,297,483
Railways	...	...	52,963,963	{ 46,739,889 8,991,235
Military	...	...	2,701,612	60,686,699
Other heads	...	...	85,032,923	67,352,959
Total			163,308,441	188,068,265

The Government Accounts excluded £21,899,799 in 1917-18 and £31,651,154 in 1919-20, of the Railway Working Expenses and the Surplus Profits paid to the Companies, from both sides of the account.

The importance of the railways may be gauged from these

figures, as also from the total number of men employed. The total number of servants of all races employed on the Indian Railways (open lines only) in 1919-20 was ...	711,690*
Strength of Civil Police in 1914 ...	202,986†
Established strength of British and Indian armies in British India (exclusive of Indian artificers and followers) in 1914-15.	235,436‡

These figures show that the Railways employ the largest number of men employed in any one Department in India.

Indians have been agitating for a larger share in the Indian Civil Service, but they have not taken the same interest in the Railway Service of India. It is larger than the I. C. S. and carries a much larger patronage. The total number of appointments in the I. C. S. was 1,371§, whereas the appointments in the Superior Grades of Indian Railways, as given in the Railway Board's Classified List and Distribution Return of 30th June 1912 were 1685.

The appointment, dismissal, promotion, transfer, privileges and prospects in life generally of subordinates are entirely in the hands of the officers possessing discretionary powers. The powers possessed by a Railway Locomotive or Carriage and Wagon Superintendent are far greater than those possessed by the Commissioner of a Division or the Collector of a District. The Railway Superintendent appoints and discharges scores of men every month in his workshop, while a Commissioner or Collector hardly makes the same number of appointments even in a year. Then the officer-in-charge of a Railway workshop has the power to appoint any mechanic on daily pay upto Rs. 10 per day, giving Rs. 250 per month or more, without sanction of higher authority and without specific provision in the Budget; whereas in all other departments, such an appointment would require the special sanction of the Government of India, which takes years to obtain.

* Appendix 26 to Railway Board's Administration Report 1919-20.

† Statistical Abstract, British India 1905-06 to 1914-15.

‡ Para 34, Vol I of Report of the Public Services Commission 1916.

§ Para 34, Vol I of Report of the Public Services Commission 1916.

Of all the departments of the Government of India, Railways stand first and foremost, both in revenue and expenditure. 35% of the total revenue of India was in Gross Receipts of railways. In 1917-18 it was 46 millions sterling = 69 crores against 21 millions = 31.5 crores of Land Revenue, though Land appears in the Accounts as the largest Revenue Head of the State. Of the total expenditure of the State, 32% was in Railway working expenses and charges, which amounted to 39.6 millions sterling = 59.4 crores in 1917-18, against 30.7 millions = 46.06 crores of the Military Department, though in the accounts of the Government of India, the Military appears as the largest expenditure Department of the State. The Railway Department appears small in the Government Revenue Abstract, because the Railway Working Expenses and surplus profits paid to the Companies are not shown as items of expenditure, while their net receipts only are shown in the Government Revenue.

While the Railway is the most important Department of the State, it is the least satisfactory to the Indian public. At almost every step, it gives a step-motherly treatment to the children of the soil.

Seventy-five per cent., of the public debt of India, excluding the last war loan, is on account of the Indian State Railways.

Thus the Railways form the largest Revenue producing and expending department of the State. Upon their proper administration depend the prosperity of the whole of the country, even agriculture and other industries, moral, material and economic growth, comforts, conveniences and safety of the millions of the travelling public.

SECTION 7.—Financial Results.

A railway cannot be expected to pay at once. The country traversed by railway has to be nursed and prepared to take advantage of the facilities the railway provides and in return to bring it traffic. Agriculture, trade, industries all receive an impetus, and general development of the country begins directly a railway line

is opened for public traffic. Railway promoters take into account the value of trade and traffic in the locality when they prepare a railway project; they also count upon an increase of traffic which generally takes place after the opening of the line. In the early days of railways, returns are sometimes low; they improve as soon as the development takes place. If the country is well populated and rich in produce, a railway line is expected to yield good profits, provided the line is constructed with care and economy. Some lines pay well from the very first year of opening, others take time for the development of traffic. The Government of India put a limit of 5 years, after which Productive railways were expected to pay the interest on their capital cost, including the interest during construction. The statement recorded at page 694 of Report of the Select Committee of 1884 shows that out of the 17 Indian railways, eleven earned net earnings which gave 3.25 to 7.12 per cent. per annum on the capital outlay, five years after their completion; while the other six earned only 0.77 to 1.94 per cent. at that age. Among these were—

The Madras Railway with	...	...	1.44 per cent.
The S. P. & Delhi Railway with	...	...	1.94 "
The Indus Valley Railway with	...	...	1.94 "
The Wardha Coal Railway with	...	...	1.10 "
The Calcutta and South Eastern Railway with	...	...	0.96 "
The Nizam's State Railway with	...	...	0.77 "

Even these lines have subsequently proved remunerative.

Appendix I to Mr. Robertson's Report of 1903 shows 18 Branch railways, six of which gave returns of over 4% per annum in the first year after completion, while all, but one or two exceptions, gave ample returns, with the Rebate from the main line, within the five years.

Excepting the railways undertaken on grounds of political and military security, or strategical purposes or purely for famine relief, the financial failure, wherever it occurred among the Indian railways, was attributed "to mistakes made during construction."

On the whole the results show that railways carefully selected

and constructed with economy eventually prove remunerative. Until they become remunerative, there is loss of interest. Who should bear such loss? Ordinarily the loss should be borne by the people, who take the subsequent profits; but this has not been done in the case of Indian railways constructed through the British Companies. Their losses and deficits have generally been paid by the Government.

Appendix No. 8 exhibits the financial results to the State from operations relating to the Indian Railways from their commencement. To the 31st March 1918, the statement shows a net outstanding of Rs. 3,01,59,21,491, of which Rs. 17,48,55,249 is included in the capital account, leaving a balance of Rs. 2,84,10,66,242.

This outstanding is attributable to the Companies' lines, viz:—

	Rs.
Loss from the old Guaranteed Companies as per Appendix No. 3A ...	3,19,95,39,690
Outstandings against Subsidized Companies as per Appendix No. 5 ...	1,41,54,103
	<hr/>
Profits from State Railways ...	3,21,36,93,793
	37,26,27,551
	<hr/>
Net Loss Outstanding ...	2,84,10,66,242

This analysis clearly shows that the Companies' lines have caused serious losses to the finances of India, whereas the State Railways have not only cleared all their expenses, interest charges, etc., but brought in a net profit of Rs. 37,26,27,551 during their first 51 years.

We have not found in the Government accounts an up-to-date statement of the outstandings against the Subsidized Companies. These are, however, being recovered from the surplus profits of their Railways; but the losses incurred on account of the old Guaranteed Companies are a dead loss and outstanding burden upon India. The Companies have caused, not only this loss of 319.95 Crores of rupees but also a standing liability upon India for the ₹33,410,803 exacted by them as premium upon their share capital.

The original amount of the losses, met from the revenues of India, was very nearly made up by the profits made from the State Railways, but a very large balance is still outstanding on account of the accumulated interest on the original losses. This interest, amounted to Rs. 2,97,69,17,629 on 31st March 1918, calculated at 4% per annum on the net yearly outstandings. We have already made clear that this interest would have accrued if the payments had been made in the first instance out of borrowed funds, instead of from revenue, and in a commercial concern it cannot be ignored.

The Railway debt and Capital obligations amounted to £367,402,209. The interest etc., on them is paid out of the net earnings of the State Railways as shown in Appendix No. 7, but as the non-railway debt of India (£111,197,351) is less than the unaccounted railway outstanding of Rs. 2,84,10,66,242, the latter has been wiped out by payments from revenues.

According to the principle laid down by Lord Salisbury in 1874 and subsequently confirmed by the Parliamentary Committee of 1878-1879, the interest on Railway Capital construction, should be included in the capital cost, and *pari passu* any deficits of interest, after completion of a Railway, should also be a charge against the capital account. In the accounts of Government, this does not appear to have been done, and the losses have been wiped out by debits to yearly general revenues of India, which have been, from time to time, supplemented by public loans. Although the Select Committee of 1878-1879 laid down that the debt incurred for Productive Public Works be kept separate from the general debt of India; but as the losses mentioned above were wiped off, no record of those losses appears in the subsequent accounts of India. It may be contended that since those losses were wiped off, no interest is chargeable on the accumulated amounts of those losses. Against such a contention we maintain that the interest is chargeable for the following reasons:—

- (1) If those losses were not incurred and not paid out of.

the general revenues, fresh loans would not have been taken for general purposes; or (2) If the amounts paid for those losses were spent on productive works, there would have been income equal to at least the interest on those amounts; or (3) If taxes were remitted, the money would have been used productively by the tax-payers.

Government have all along maintained that, with the exception of those Railways which were built as Protective Works against famine or foreign foe, Indian Railways are a commercial concern. As such their transactions should cover every penny spent or incurred on them. The losses in the shape of guaranteed interest, subsidies, deficits of working expenses during early periods, interest during construction, charges for land, supervision and pensions of staff, should all be taken into account, as a commercial body would do, in declaring dividends from a trading or industrial concern. Under this consideration, the accumulated losses, with interest thereon at least at 4 per cent per annum, should be treated as a part of the capital expended on the Railways.

In this connection we may quote the following questions and the answers given by Mr. Henry Waterfield, Financial Secretary at the Indian Office, before the Select Committee of 1884:—

Question 6110.—“Does the table contained in despatch 143 to the Government of India, which has been laid before the Committee, give the total charge for Railways that has been borne by the Government?—”

Answer.—“It gives the complete charges that have appeared on the accounts; but it has been argued that, as the Government has in the course of those 37 years advanced 41 crores of rupees to the Companies, including the payments for interest on State lines, and has at the same time been contracting loans, the interest on loans to the amount of 41 crores has really been charged in the accounts as a result of the Railway policy, but is not shown in that statement.”

Question 6111.—"In that view of the matter, what further charge would have to be added to the 41 crores?"

Answer.—"Assuming an average rate of interest at 4 per cent., throughout the period, the additional charge is about $36\frac{1}{2}$ crores, against which must be set a credit of $6\frac{1}{2}$ crores for interest on the balances of the Companies in the hands of the Government. This would make a total charge exceeding 71 crores, or, on the average, nearly 2 crores a year for 37 years, which represents the price paid by the people of India for the numerous advantages they have derived and are deriving from the use of the Railways."

In paragraph 18(1) of their Report, the Select Committee of 1884 repeated the opinion expressed by Mr. Henry Waterfield of the India Office that the loss incurred by the Government of India by their Railway policy "Represents the price at which India has purchased the great advantages, she derives from the net work of Railway traversing the country in all directions, and enabling her people to move their produce and goods with a facility which was unknown before the Railways were made." The principle of charging interest on the "Payment" which we call loss, was however admitted by the Parliamentary Committee.

In the Viceregal Legislative Council of India, the Hon'ble Mr. Madholkar asked in March 1912:—

"(a) Is it a fact that there was net loss to the State on Indian Railways from the commencement of their construction till the end of 1894-95? If so, was the amount of such loss over Rs. 5,184 lakhs?

(b) Will the Government be pleased to lay on the table a return showing the net gain or loss to the State each year commencing from 1895-96 upto 1910-11?"

The Hon'ble T. R. Wynne replied:—*

(a) The reply is in the affirmative.

(b) The information covering the period 1895-96 to 1910-11 will be found in Section H. of the several

Finance and Revenue Accounts of the Government of India."

"I would like to point out," added the Chairman of the Indian Railway Board, "that the figures quoted in the first part of the question are calculated, if taken by themselves, to give an entirely misleading impression. They necessarily leave out of account the great development of Indian trade, agriculture, etc., attributable to the construction of Railways and the consequent increase in the Revenue of the State, which there is every reason to think more than counterbalances the apparent loss."

These answers ignore the argument advanced against this view by the Select Committee of the House of Commons on East India Public Works in 1878-79, which we quote here:—

"If this annual loss on the Railway expenditure had not been met out of the general revenues of India, but had been yearly added to the capital actually expended, the financial results would have been still more unsatisfactory. On the other hand, these calculations make no allowance for any of the indirect benefits directly traceable to Railway communication, such as enhancement of the value of land, the opening of new markets, the impetus given to the export trade, the reduction in the military establishments from greater power of transport and concentration, and the many other benefits derived from rapid and easy intercommunication in a territory of the enormous areas of India.

"Without in any way ignoring these collateral gains, it must be remembered, that originally the policy of guaranteeing the interest on capital expended in the construction of public works was promoted on the ground, not that the indirect benefits would be a sufficient compensation for the direct financial loss, but that *in all probability the State would have the benefit of a remunerative return, in addition to indirect advantages.*"*

The italics are ours. Considering that the Railways were a commercial concern, conducted on commercial principles, the loss

* Report of the Select Committee on East India Public Works 1879 page viii.

cannot be justified by any indirect gains which cannot be expressed in definite figures. Against the indirect gains, we must also take the indirect losses caused by the destruction of the indigenous industries of India and by the rise in prices amounting to a perpetual famine, brought about by the communication established by the Railway between India and foreign countries.

While we admit Indians have gained to some extent from the development of trade and agriculture, it is also the fact that the bulk of the export and import trade of India is in the hands of foreigners. Indians did not urge the rapid construction of Railways. It was urged by the Chambers of Commerce of Manchester and Glasgow, by the European Chambers of Commerce at Calcutta and Bombay.* While the lion's share of advantages from the trade of India go to Europeans and European countries, the burden of losses from the Railways has fallen entirely upon India.

Referring to the action of the European Chambers of Commerce in India, General Strachey made very pertinent remarks in his answers to questions Nos. 24 and 25 before the Select Committee of 1884. They are quoted below:—

Question.—“Do you think that there is a danger of Railways being too rapidly constructed in India?”

Answer.—“I think that the proposals that have been made by various parties in India, which have been backed up by people in this country (England), are very excessive and that those proposals have been put forward by persons who in reality are *not interested in the taxation of the country.*” “They would not bear the weight of it; not a half-penny of it would come upon their shoulders.”

Our Statement No. 8 gives a complete Financial history of Indian railways. We particularly draw attention to the following points deducible from that Statement:—

- (1) That there were actual losses to the State, while annual accounts showed profits from the Railways.
- (2) That the maximum limit of two millions sterling = 2

* Pages 595-608 of the Report of Select Committee of 1884.

crores of rupees, laid down by Lord Lawrence for annual expenditure *out of the revenues of India* on account of Railways has been largely exceeded.

- (3) That the repeated declaration of the highest authorities that the extension of Railways should not involve additional taxation has been *indirectly* broken.

- (4) That in declaring surplus profits on the Railways, especially during recent years, the ordinary commercial principle of allowing for depreciation on stock and works has not been applied.

The Railway Administration Reports and the Finance Accounts of the Government of India have for years past, been showing net profits to the State from the Railways of India.† We find the following figures of such profits in the latest Accounts:—

Year.	Pounds.
1914-1915	2,158,034
1915-1916	4,075,438
1916-1917	7,481,875
1917-1918	9,914,323
1918-1919	10,568,097
1919-1920	6,565,191

These figures, however, did not take into account the huge sums of interest indirectly borne by India on Railway items which have been charged off yearly against the revenues of India. Among these were the losses incurred on account of the old Guaranteed Railways, losses incurred by the working of the State Railways during their early periods, etc. Were these charges added to the Capital Account of the Indian Railways from the very commencement, we should have seen the true financial position of our Railways, but this has not been done in the Government Accounts. The losses incurred yearly were charged off to general revenue and wiped out.

While Indian revenues were year after year bearing such charges, new loans were taken on general account. Had the

† Accounts No. 53 A in the Finance and Revenue Accounts of India.

Indian revenues *not* been debited with the losses on account of the Railways, the taxes would have been largely kept down; or finances of India should have shown large credit balances instead of the debts which they have at present; or there would have been large sums available for educational and sanitary requirements of the people. The Public Debt of India is, therefore, more than entirely due to the Railway losses debited to the General Revenue Account. This view is supported by what the Financial Secretary of the India Office, Mr. Henry Waterfield, said in his answer to questions No. 6110-11 before the Select Committee of 1884. Lord Lawrence, in paragraphs 6 and 7 of his famous minute, dated 9th January 1869, referred to the proposal that such losses might be debited against the Capital accounts of the Railways, and suggested that the Railway extension might be limited to a sum "which could be *fairly* taken from the yearly income of the country.

Our Statement clearly shows that, throughout the periods of 71 years, India has been defraying yearly losses, notwithstanding the so-called net profits latterly shown in the Government Reports and Accounts.

Taking the figures for each decade, the losses were as noted below:—

	Actual Loss.	Compound Interest on accumulated Loss.	Total.
	Rs.	Rs.	Rs.
1st 13 years ...	6,42,23,959	57,14,584	6,99,38,543
1861-62 to 1870-71	16,74,40,447	6,80,54,070	23,54,94,517
1871-72 to 1880-81	19,77,35,462	18,30,55,139	38,07,90,601
1881-82 to 1890-91	15,57,24,818	35,81,04,946	51,38,29,764
1891-92 to 1900-01	17,44,90,074	62,08,18,190	79,53,08,264
1901-02 to 1910-11	—16,55,08,596	92,64,70,042	76,09,61,446
1911-12 to 1917-18	—55,51,04,302	81,47,00,658	25,95,96,356
	3,90,01,862	2,97,69,17,629	3,01,59,19,491
1918-19	—15,68,46,898	12,06,36,779	—3,62,10,119
1919-20	—9,84,77,865	11,91,88,375	2,07,10,510
Total ...	—21,63,22,901	3,21,67,42,783	3,00,04,19,882

The last three years showed unusually large net profits on the State Railways. These were largely due to suspension of a large amount of repair and renewal work, which could not be done owing to non-receipt of material from England on account of the War. Even such inflated profits were only enough to cover the interest on the accumulated outstandings.

We question the propriety of allowing the Railway Administrations to so largely and unduly increase the surplus profits by suspending the ordinary repair and renewal work. Every Railway Administration is required or expected to keep a programme of renewals of Rolling-stock and Permanent-way, with estimates of their costs. It was not therefore difficult to make out a yearly estimate of the cost of the work suspended. Such estimated cost should have been kept in reserve out of the half-yearly gross earnings, before declaring the profits. This does not seem to have been done, and the result is that there is a large amount of arrear work to be done, the cost of which may now be debited entirely to the State, as the Companies do not bear any share of deficits of the working charges. There was, therefore, an undue gain to the Companies from the increased profits during the war period.

In his Presidential address at the annual meeting of the Indian Railway Conference Association in October 1920, Major-General Sir H. F. E. Freeland, Agent of the B. B. & C. I. Railway, admitted that no reserve fund was created during the War period to meet the renewals, which were "seriously behind" on all lines in India.

It is surprising that the auditors passed the accounts with such inflated profits. It may not have violated the letter of the rules of accounting laid down by the Government of India for Indian Railways, but surely it is contrary to the principles under which divisible profits are arrived at in ordinary commercial undertakings, and to the duties of Auditors as laid down in Sections 132 and 145 of the Indian Companies Act 1913, read with the form of Balance Sheet prescribed in Form F. of the Third Schedule thereof.

In view of these facts the rules and orders laid down by the Government of India for the preparation of Capital and Revenue Accounts of Railways should be suitably amended and special provision made for the creation of a Depreciation Account and a Reserve Fund to cover the charges which are at present arbitrarily met partly from Capital and partly from Revenue.

The figures given above show how the Railway deficits borne by Indian Revenues have risen from an average of Rs. 53,79,888 per annum in the first period of 13 years ending 1860-61, to Rs. 4,32,66,059 per annum during the six years ending 1917-18.

According to Sir Stafford Northcote's orders of 1868, a limit of the annual charge on the revenues of India on Railway account was to be fixed, under which as the revenues were relieved of the charge by old lines becoming self-supporting, new ones were to be taken up in their place. This limit was fixed at 2 millions sterling or two crores of rupees per annum by Lord Lawrence in 1869. Then in 1874, Lord Salisbury laid down that no works were to be constructed with loans, except those likely to be remunerative by yielding annual income equal to the interest on the capital expended, including in such capital the interest during construction. This principle was unanimously adopted by the Parliamentary Select Committee of 1878-1879. The latter further laid down that the amount to be annually expended upon Productive Public Works should mainly depend upon the Financial condition of India and they fixed the maximum amount to be borrowed and spent in any one year at £2,500,000 plus such surplus revenue as may actually be found at the close of a year's accounts. This limit was persistently maintained by Lords Hartington and Kimberley upto 1884. The Select Committee of 1884, however, relaxed that limit by according their approval to the programme of the Government of India which provided an annual sum of £5,692,400 for five years. The decision of that Committee was based upon the past Capital expenditure on Indian Railways, which for the years 1859-60, 1860-61, 1866-67 and

1867-68 gave totals of over 7,000,000 per annum, though the average for the 29 years ending 1877-78 was £ 3,932,987, only† and the average for the ten years ending 1883-84 was 4,607,000.* Instead of taking the isolated figures for the 4 years mentioned above, the Committee should have taken the average for the whole period. Moreover the high figures of those four years represented expenditure by the old Guaranteed Companies, who had lavishly spent the money at the entire risk of India. This mistake on the part of the Committee of 1884 is, we submit, responsible for the heavy expenditure which has been incurred on the construction of the State Railways in India after the year 1884. The annual expenditure in 1898-99 was £5,894,746, it rose to £6,705,064 in 1902-03 and continued to rise steadily until the allotment for 1907-08 reached a total of 10,000,000 sterling. The Committee presided over by Sir James Lyle Mackay (now Lord Inchcape) in 1907, went further and increased it to £12,500,000 per annum or larger sums if money could be obtained. These large outlays on the capital account added largely to the interest charge paid by the Government of India. We have now to consider whether the Mackay Committee was justified in raising the amount of Capital expenditure on Railways. No doubt the Committee was actuated by motives to improve the efficiency of the open lines of Railways by providing them with larger facilities and fuller equipments, and to ensure rapid extension of Railway in India. No body would deny that great benefits usually accrue from a judicious Railway extension, but the vital question to be considered is whether the finances of India allowed of such a rapid extension and whether the people of India were prepared to take economic advantages from the Railways.

From statement No. 8 it will be observed that the annual net charge against the revenues of India from the beginning of this

† Page v of Report of Select Committee of 1872.

* Page iv of Report of Select Committee of 1884.

century varied from 7.20 crores in 1900-01 to 8.34 crores in 1914-15. The limit fixed by Lord Lawrence in 1869 was 2 crores only. We find no authoritative alteration of that limit. That limit has been thus largely exceeded as our figures clearly show.

The declared policy of the Government of India from the year 1876, which was endorsed most emphatically by the Select Committee of 1884, has been that, however advantageous the the extension of Rail-roads may be, it would not be right to carry them out at such a rate as would require the imposition of additional taxes. Have the large sums of the net yearly charge against the revenues of India, as shown in our Statement mentioned above, been met without additional taxation?

We have made it pretty clear that if the losses on account of the Railways were not debited to Indian revenue, there would have been surpluses in the annual accounts of the Government of India, which would have led either to a remission of taxes or to improvements in other directions, such as larger extension of Irrigation works and improvement of agriculture, introduction of compulsory and free education, provision of sanitary measures in rural and urban areas, etc. At the sacrifice of all these, we have got Railways. Before we discuss the matter of advantages gained by Indians from the Railway extension, we should note that the following additional taxes have been introduced since the great extension of Railways after the year 1881:—

Income Tax in 1886, Enhancement of Salt-duty in June 1888, Petroleum and Patwari Taxes and Extension of Income-tax to Burma in 1888-89, Increase of Customs on imported liquor 1889-90, Excise-duty on Indian Beer 1890-91, Import-duty on Salt-Fish in Burma 1892-93, Reimposition of the 5 per cent. *ad Valorem* duties on imports, excluding Cotton-goods in 1893-94, Import-duties on Cotton-goods 1894-95, Changes in the Tariff in 1896, *viz*:—

- i. Abolition of the 5 per cent import and excise duties on Cotton yarns.
- ii. Reduction of import duties on Cotton-goods from 5 to $3\frac{1}{2}$ per cent.

- iii. Imposition of a countervailing Excise of 3½ per cent. on other Cotton-goods of all counts manufactured in Indian Mills.

(The first two involving a sacrifice of 50 lakhs of rupees as a concession to clamour of Manchester), Imposition of countervailing duties on imports of bounty-fed sugar in 1899. The total additional revenue raised by the above taxation during the 16 years upto 1900-01 was no less than 12·30 crores a year.*

Although these enhancements in the taxation were made on grounds other than the construction of railways, they did entail additional burdens on the country and were indirectly influenced by the large outlay on the railways. We have not been able to give particulars of the new taxation imposed since 1902.

The grounds, on which the more rapid construction of railways in India was urged, were given† by the Select Committee of 1884 as follows:—

- (1) Necessity for increasing the works likely to protect the country against famine.
- (2) Development of internal trade of India, with the results of reducing the price of salt and other necessary articles of consumption, of increasing the price of grain which had previously found no market, and of equalising prices throughout a large extent of country.
- (3) Rapid development of the export trade.
- (4) Inducement to the people to substitute wheat for less remunerative crops, to improve their crops, and to extend the area of cultivation, and opening of more sources of supply as the railways tapped fresh districts.
- (5) Increase in the land revenue of the Government‡
- (6) Opening up of valuable coal-fields; and possibility of profitable working of iron mines.

* Budget Speech, 26th March 1902, of the Hon'ble Mr. G. K. Gokhale.

† Para. 17 of their Report.

‡ In para. 6887 of evidence before the Select Committee of 1884, two instances were given where land revenue was enhanced 15·4 and 11·8 per cent. on account of railway.

(7) Improvement in the economic and material condition of the people through rise in wages and spread of manufacturing industry among a people of whom the great bulk gained their living entirely from agriculture. Facility for immigration from overcrowded districts.

(8) Cheapness of materials especially of iron and steel to push the construction of Railways.

(9) Improvement in the credit of the Government of India which cheapened the borrowing of capital in London.

(10) The possibility of accelerating the construction of Railways through the agency of companies.

(11) The experience of the conditions of railway construction in India gained by engineers leading to much reduction in cost.

(12) Improvement in the Financial position of the Government of India since 1879.

(13) Advantage and economy of speedy completion of railways over slow construction.

We do not propose to discuss these grounds in detail but consider it necessary to draw attention to the main results which have followed the introduction of railways in India.

SECTION 8.—Economic effects of Indian Railways.

The rapid construction of railways in India connecting the fertile plains with the main ports and the linking of the Indian with the European ports, by steamships taking the short cut of the Suez Canal, brought the Indian market into touch with the world market and led to a growing export of food-stuffs and raw materials, a growing import of manufactured articles, an increasingly rapid decay of the indigenous arts and crafts, and an increasing pressure on the land. The new world which thus burst forth upon India found the people quite unprepared for it and the Government did not think it its duty to train Indians for modern industry and commerce, as, for instance, the Japanese

Government did. The State undertaking the construction and management of railways with Indian materials and Indian staff and labour as far as possible would have carried out the duty at least partially, but it was not allowed to do that by the capitalists and manufacturers in England, who wanted to exploit the Indian field themselves.

Mr. Henry Waterfield, Financial Secretary at the India Office, was opposed to a large extension of railways without preparing the people for it, as is evident from his answer to question No. 6268 before the Select Committee of 1884. We quote that question and his answer in full:—

“6268. You do not think it very important that a large area should be without railways? I think it is more important that the people should become gradually familiarized with the extension of railways, than they should be put down in every district before the people have learnt to take advantage of the extension in many ways.”

The history of Indian Railways forms a very important part of the history of India since the middle of the last century. The Railways have produced results of a far-reaching character and have materially altered the economic, social and political life of the people. They have established a rapid communication between the different provinces and cheapened the costs of transit of goods and passengers. They have greatly developed the trade and intercourse among the people and have materially helped the march of education. They have fully accomplished the political and strategical object with which they were started. In the Afghan War of 1878-79 and in the War in Europe in 1914-1919, the Indian Railways demonstrated their military value by conveying large bodies of troops and by supplying munitions for the war in Europe and elsewhere. They have so much helped to prove what a valuable asset India is to the British Empire. With all these advantages, the economic effects on the life of the Indian people have not so far been an unmixed blessing. The Railways were introduced before the people were prepared by education and

industrial and commercial training to take full advantage of their economic uses. In those respects the people are still very backward and consequently unable to take many of the advantages which the railways have opened to them.

By the opening up of the through communication with other countries, India has been invaded with foreign manufactures, which have destroyed most of the indigenous industries of India, and thrown a large number of persons out of their work. Some of the Railways were provided specially to protect Indians from the effects of famines like those which occurred in 1866-69 and 1876-78, carrying away six millions of people. The object has been achieved but the export of food grains and raw materials to foreign countries, and the fact of India coming directly under the world influences by the opening up of the railway communication with ocean steamers, have created a situation which no body in India previously thought of. The prices of food grains have now become permanently dearer than the old famine rates, which used to occur once on an average in eleven* years before the advent of the railway. This has been aggravated by export of food-stuffs to foreign countries, owing to peculiar conditions prevailing in India. The rise in prices of agricultural produce should have largely benefitted the mass of the people who follow the agricultural profession, but this has not been the case. A very large number of agriculturists, especially those holding small

* Sir James Caird K. C. B., who was a member of the Indian Famine Commission of 1879, wrote at page 215 of his "India the Land and the People," 1883; "Science tells us and experience confirms it that in India you may count on nine famines in a century." The famines in the nineteenth century were in 1803-4, 1837-38, 1860, 1865-67, 1868-70, 1873-74, 1876-78, 1896-97, and 1899-1900.

In the famine of 1866-69, the price of wheat in Ajmer per rupee was—

16½	seera in June	1868
10	" " September	"
7½	" " March	1869
4½	" " September	"
5½	" " October	1869
6½	" " December	"
9	" " May	1870

The prices of wheat, in rupees per rupee, in normal years, in some of the places

areas, are struggling hard for their existence. They do not get full benefit of the rise in prices, chiefly owing to their ignorance and poverty, and have often to re-buy their food and seed grains at much higher rates than those they realize for their own produce. The greater portion of profits made on the export trade goes to traders, many of whom are not Indians. The higher rates caused by the export of grains affect non-agriculturists as well as the agriculturists of India. A check on the export of food-stuffs is called for. Exports may be allowed only when there are surplus stocks and no possibility of prices rising in the country beyond the normal rates.

The Indian agriculturists, with whatever gains they have made from the high prices, are still as bad economically as they ever were. Paragraph 378 page 100 of Vol. I of Mr. K. L. Datta's Report on the Enquiry into the Rise of Prices in India (1914) states that "witnesses were almost unanimous in saying that except in some tracts where the agriculturists are peculiarly advantageously placed, they are indebted now as they were before, if not more." The Report of the Government Committee of 1914-15 on Co-operation in India tells the same fact in a more striking manner. "It was found," it states, "in many parts of India, that in spite of the rapid growth of Commerce and improvements in communications, the economic condition of the peasants had not been progressing as it should have done, that the indebtedness instead of decreasing had tended to increase."

With the export of grain India keeps no stock which might be of use in the event of a serious famine occurring in India in future.

compared as follows :—

Fortnightly Reports in Government Gazette,				Average annual price.	Fortnightly Reports in Government Gazette,				Average annual price.		
April 1875.				April 1916	1919.	April 1876				April 1918	1919.
1	Barisal	20	10.35	6.10	10	Alwar	25	9.75	7.10		
2	Lahore	24	11.0	6.33	11	Jaipur	17.44	8.5	5.46		
3	Delhi	22	9.5	5.80	12	Jubbulpore	28	10.25	5.12		
4	Meerut	23.5	10.0	5.95	13	Bilaspur	52	10.625	5.50		
5	Agra	20.25	.....	5.59	14	Pand.	17.08	7.37	4.88	
6	Cawnpur	22	9.5	5.64	15	Dhormar	28.12	11.31	4.18		
7	Aligarh	25.5	9.75	6.00	16	Bhoos	15.75	8.87	3.71		
8	Patna	22	10.0	6.61	17	Ahmedabad	13.5	8.0	4.39		
9	Ajmer	25	7.75	4.84							

By exporting grain and seeds and other raw material, India has had its material progress retarded. Were it not for the foreign competition which the opening of the Railway has facilitated, India would have continued its manufactures and improved its old methods by using modern ways, but the old manufacturers had no chance of saving themselves. They were suddenly attacked in sleep and could not even rise to see how to protect themselves.

Those who were formerly engaged in industries have been, by the closing of their industries, thrust upon agriculture, and whatever the old generations knew of the old industrial arts has been lost, the new generations knowing very little or nothing of it now.

The Railway history of Western countries shows that the introduction of railways has been generally followed by a general development of industries; whereas the reverse has been the case in India, because the people were not prepared to take advantage of the facilities opened out by the railways, which were prematurely penetrated into the country. Had the Government started the industrial training of the people at the same time as they started the railway construction, the results in India would have been similar to those in the Western countries. But as most of the Indian people have been kept ignorant of the modern ways of Commerce and Industry, the effects of the railways in India have been disastrous to the industries of the country under the free-trade policy of the Government. Owing to these drawbacks, the Indian people have not only borne all losses involved by the provision of the railways, but have also lost whatever manufacturing industries they had in the country before the advent of the Railway in India. In this connection we quote the following extract from pages vii to ix of "Economic History of India under Early British Rule" by Mr. R. C. Dutt, 1906 :—

"It is, unfortunately a fact which no well-informed Indian Official will ignore, that, in many ways, the sources of national

wealth in India have been narrowed under British Rule. India in the 18th century was a great manufacturing as well as a great agricultural country, and the products of the Indian loom supplied the markets of Asia and of Europe.

"It is, unfortunately, true that the East India Company and the British Parliament, following the selfish commercial policy of a hundred years ago, discouraged Indian manufactures in the early years of the British Rule, in order to encourage the rising manufactures of England. Their fixed policy, pursued during the last decade of the eighteenth century and the first decade of the 19th, was to make India subservient to the industries of Great Britain and to make the Indian people grow raw produce only, in order to supply material for the looms and manufactories of Great Britain. This policy was pursued with unwavering resolution and with fatal success; orders were sent out, to force Indian artisans to work in the Company's factories; commercial residents were legally vested with extensive powers over villagers and communities of Indian weavers; prohibitive tariffs excluded Indian silk and cotton goods from England; English goods were admitted into India free of duty or on payment of nominal duty.

"The British Manufacturer, in the words of the historian H. H. Wilson, employed the arms of political injustice to keep down and ultimately strangle competitor with whom he could not have contended on equal terms; millions of the Indian artisans lost their earnings; the population of India lost one great source of their wealth. It is a painful episode in the History of British Rule in India, but it is a story which has to be told to explain the economic condition of the Indian people, and their present helpless dependence on agriculture. The invention of the power loom in Europe completed the decline of the Indian industries, and when in recent years the power loom was set up in India, England once more acted towards India with unfair jealousy. An Excise duty has been imposed on the products of cotton fabrics in India, which disables the Indian manufacturer from competing with the manufacturer of Japan and China, and

which stifles the new steam mills of India."

Against the great losses incurred by India from its Railways, the only appreciable gain we see is that from the employment of Indians, mostly in the lower posts on Indian Railways, and in the mills and other factories which have been possible only with the transit facilities provided by the Railways.

Major portion of the modern Indian trade is in the hands of Europeans, and any gains which Indians have made from it go towards the losses from the destruction of old indigenous industries and commerce. Although agriculture has been extended, but the illiteracy and poverty of the people have kept modern methods of agriculture out. It is highly questionable whether agriculture, as it is carried on at present in India pays. A decline is setting in and the agriculturists, especially in the neighbourhood of large factories, are leaving agriculture and prefer to work in Mills and Railway Workshops.

Foreign countries and European dealers doing business in India are the chief gainers by the extension of railways in India. European dealers have practically a monopoly of the export and import trade and the foreign countries obtain food grains and raw material for their factories at cheap prices. Whether these prices pay the Indian producers is doubtful. The gains of Europeans are at the expense of consumers in India, who are now suffering from high prices. The prices in India are no longer governed by the local markets, but by markets of the world. This requires that the income of the Indian people should also be raised to the European level. This has not been the case and this state of economic disparity requires an adjustment. By the loss of their old industries and want of technical instruction, a large portion of the people have become helpless, since they are unable to find paying work. Even agriculture does not pay in many parts of India and the condition of a large number of literate men in clerical services is far from satisfactory, as for want of work and overcrowding of those services, the men are compelled to work on salaries which hardly give them a living wage.

The foregoing facts lead us to the conclusion that Railways may not be introduced in a country until such time as its people are educated enough to construct and work their own railways and to protect their industries from invasion by foreign manufactures, and to take full advantage of the facilities afforded by the opening of a railway, especially towards the development of their industries and commerce. If the education and industrial training of the people on modern lines do not actually precede the construction of a railway, such instruction and training on an adequate scale should be given simultaneously with the sanction for a railway project or as early thereafter as possible.

To show how the people in India feel about the railways, we reproduce the following extracts from an article which appeared in the *Prabasi* of Bengal on the Budget allotment for 1919-20. Taking the chief wants of the country under three heads, *viz.* :— Belief from poverty, epidemics, and illiteracy, it made the following comments :—

“First, the railways do not remove the poverty of the land, carrying the foreign manufactures to the remotest and the meanest hamlet, they are killing the indigenous industry, and thus rendering the Indian artisan unemployed and starving. If the peoples of India had all sorts of industries in hand, and if those industries had the same facilities regarding freight, etc., as are enjoyed by the foreign-manufactures, the railways would have been a source of advancement of our industries and would have increased our country's wealth. The railways are increasing the poor man's sufferings in other ways: the farm products of the village are carried away to far distant countries. The poor people of India cannot buy them at the price, the people of richer countries pay for them. Thus the village is being swept off of food grains. When there is a famine the village people starve. The cultivator who sold the grain did receive some money no doubt; but, during famine, when his farm does not yield enough grain, if he wants to buy any grain, he cannot do so at the price he sold.

Secondly, far from improving the condition of health of the

land it is causing deterioration. The place which was free from malaria becomes at once infected with it with the construction of a railway line there. Epidemics such as plague, influenza, are quickly transmitted from one place to another by means of railways. There have been outbreaks of plague in India before the advent of the British, but on account of difficult communication they were not so widespread.

Thirdly, it is needless to say that the railways do not remove the illiteracy and ignorance of the country."

Railway facilitates and cheapens transport, and quickens the journey, thereby it stimulates trade and commerce, cheapens prices and multiplies industries and production. It has a double blade which acts both ways. If the people are intelligent enough, they can turn both blades to their own benefit, otherwise foreigners may reap benefits at their expense, as has actually been the case so far in India. Great care is therefore necessary to guard against this double blade being turned against the people's interests. If the people be unaware, it is the duty of their guardians, trustees and leaders to show them the right way. In India the former failed to perform that duty. It is now for the intelligent people themselves and their leaders to guard against the evils and losses and to take full advantage of the great facilities provided by the railway.

The export of raw material from India, not only causes the loss of manufacturing business, but adds largely to the costs of manufactured goods received from the foreign countries, by the profits charged by the middlemen, besides the double freight by rail and water.

Take, for instance, cotton and jute both of which are largely grown in India. The growers hardly get a living wage and shelter themselves in huts of mud and grass; while the middlemen in Bombay, Lancashire, Dundee, etc., have their palatial buildings and are rolling in wealth. Instead of selling the raw material to foreign countries, India should manufacture it as near the district of production as possible, and thus save all the expenses in pres-

ing, baling and double carriage, as also the profits of middlemen employed at several places and in several trades.

Because India did not learn the modern arts of cheap manufacturing, it has lost all the wealth and has become so poor. If India were efficient in these arts, the railways would have very largely helped her in developing her resources to her own benefit. The railways can even now do that if they be worked properly to achieve that aim. The new Councils can effectually arrange this.

The best way for establishing manufacturing industries will be on Co-operative lines as in Denmark, i.e., the farmers themselves should do the three-fold business of agriculture, manufacture and trade and commerce. All these three businesses should be done by the original producers of the raw material, excluding the middlemen, whose toll partly deprives the producers of their just dues and largely adds to the costs borne by consumers. Both the losing parties will gain by the elimination of the middlemen's profits and charges.

The agriculturists must combine and establish Co-operative factories of their own for dealing with all or principal articles of their produce. For erecting the necessary buildings and machinery, they will have to borrow the capital on their joint responsibility, at the market rate of interest. If they plan to do the business on intelligent lines, as the Danes do, there will be no lack of capital. Mechanical engineers and workers for the factories can be engaged on the market rates of pay and wages, with a share of profits as the Danes allow. I think this is quite practicable. We have the living example of Denmark before us. It will be to the general advantage of the country and all should combine to form and help the business. Land-owners, agriculturists, and capitalists should especially co-operate, and the Government Ministers for Agriculture and Industries should assist the people to bring about this great change in the life and business of the country.

This is the scientific method of reducing the prices which have now so many tendencies of rising higher and higher. It has the

Besides the transportation facilities obtainable from the railways for such local industries, the railway workshops are eminently equipped and can be further fitted up for the training in mechanical engineering, which is urgently needed for the betterment of agriculture and establishment of manufacturing industries in all parts of India. We draw particular attention to the suggestions on this subject contained in Section 7 of Chapter II herein. Properly utilized, railways are of a great economic value to the country. The causes which have hindered the realization of that value in India should be completely removed, and due reforms made at the earliest date possible. To achieve this great object, the railways should be placed in charge of Indian Ministers both in the Central Government and in the Provinces; and a strong committee with a majority of Indians appointed to overhaul the whole system of railway working, so as to effect retrenchments of unnecessary expenditure and to organize the machinery—personal as well as mechanical—on a sound basis.

The aim and object of our railway policy should be primarily to develop the industries, agriculture and other produce, trade, and general welfare of the country by the lowest rates of transport practicable. Secondly, the object should be to increase the revenue, and thereby reduce the direct taxation of the people. These objects cannot be fully attained without Indianising the main departments of railway administration and working. The foreign agency now employed is too expensive for the people to pay and gain any material advantage from the railways. Such agency should accommodate itself according to the economic circumstances. It is true to some extent we need experts from foreign countries. We should pay them liberally in order to have full advan-

* कृषि गोरक्ष वाणिज्य वैश्य कर्म स्वभावज्ञम् । १८ । ७७ ।

tage of their skill and experience, but we do not need so many of the officials who pass under the class of experts from overseas countries and are maintaining a prohibitive standard of pay and allowances, which it is difficult for the country to pay. The officials are for the country and not the country for the officials.

After the year 1884, the extension of railway in India was too rapid. There was undue haste in pushing on the railway track. During the ten years from 1891 to 1900, 8348 miles of railway were opened or 2.28 miles per day. Many of the lines were opened to public traffic without the provision of sufficient carriage stock, or fencing of the line, not to mention safety appliances.

The immediate effect of this hurry was an impetus to the import and export traffic in goods with foreign countries, loss of local industries, and packing of 3rd class passengers in cattle trucks and goods wagons, while thousands of cattle were run over and killed by trains on unfenced lines, without any compensation to the owners of such cattle.

The mischief did not stop there, and the railway administrations are now facing difficulties for funds to meet the cost of deficient equipment, which should have been provided before opening the lines to traffic. These difficulties are accentuated by the failure of the railway administrations to carry out the renewals of line and stock during the war period or to provide the necessary reserve funds for those arrears of their current work. It is totally wrong to attempt to meet the deficits by raising Rates and Fares. The proper remedy lies in the curtailment of unnecessary expenditure on works and in workshops and reduction of the high salaries of the higher officials.

Signs of improvement in the condition of people from the influence of railways or otherwise were given by Mr. (afterwards Sir Juland) Danvers in the following words:—
“I think if a district is found to produce 8 or 10 times more than it used to produce in the shape of corn, grain or seeds, that is a proof that it is improving and, I think, if you find manufac-

tures increasing in a particular district, there must be a number of men employed on them, and there must be general distribution of money, which must have a good effect on the population in the neighbourhood."*

While Sir William W. Hunter said: "I consider a people prosperous when I see the schools filling and the prisons emptying, and wages rising, and exports increasing without a proportionate enhancement of prices" †

Are these signs fulfilled in India? No. The large quantities of raw material exported from India do not necessarily form an indication of increasing prosperity of the people. Exports may be made through necessity with unremunerative prices.

The history of Indian railways brings out the following facts:—

(1) That Indian money has been lavishly spent in pushing on the railways for the benefit of the foreign trade and commerce, while sufficient efforts were not made to educate the people of India to take advantage of the opportunities created by the railways.

(2) That Indian interests have been often sacrificed for the benefit of foreign trade and foreigners.

(3) That the introduction of the railway in India is responsible for the extermination of the indigenous industries of India by placing India in direct touch with foreign manufacturers and bringing their cheap imitations and fancy articles to the remotest corners of India.

(4) That the rise in prices in India is directly due to the advent of the railway in India, as this rise has not been accompanied by a proportionate rise in the income of the Indian people, it has created economic difficulties resulting in poverty, misery, sickness and general helplessness among a large mass of the people.

(5) That the Secretary of State for India has been exercising his powers to further the interests of the Indian Railway Companies incorporated in England, by granting them undue conces-

* Paragraph 7025 of Evidence before the Select Committee of 1884.

† Para. 7215 of *ibid.*

sions, modifications of their contracts, extensions of the periods of their contracts, etc., at times against protests from the Government of India.

(6) That the Committees appointed by Government before 1920 to enquire into Indian railway matters, had no Indian member on them, nor did the Committees make any attempt to ascertain Indian opinion on the questions at issue. The Select Committees of 1878-79 and 1884, the special Commissioner of 1902-03, and the Committee on Indian Railway Finance and Administration of 1907-08, are instances in point. Several of the changes made on the recommendations of the last three have proved highly prejudicial to Indian interests.

(7) That Europeans have made a sort of monopoly for the higher posts of power and emoluments to the exclusion of Indians, not only in British India but also in some of the important Indian States. Indians, however qualified, are generally kept down in lower posts, more prominently on State railways entrusted to Working Companies.

(8) That discriminations are openly made between Europeans and Indians, and Indian money is spent for the comforts and conveniences of the former. Different scales of pay, allowances, and privileges of kinds are laid down for subordinate employes of European extraction and Indian.

It was the advent of the railway into Rajputana which deprived the people of the free use of salt from the Sambhar Lake. The Government Director in England of Indian Railways made a special mention in his Annual Report for 1870-71 of the treaty made between the British Government and H. H. the Maharaja of Jaipur for the lease of the Sambhar Salt Lake, by which the British Government acquired the exclusive right to manufacture and sell salt there.

SECTION 9.—Traffic in pre-rail days.

Before introduction of the railway in India, internal traffic

was carried over roads and rivers, the conveyances used being :—

1	Palanquins or Dolies,	} for passenger traffic.
2	Shigrams (covered coaches),	
3	Ekkas,	
4	Ponies and Horses,	} for goods and passengers both.
5	Bullock carts,	
6	Camels,	
7	Boats,	} for goods only.
8	Bullocks,	
9	Donkeys,	

2 and 3 were run on *pucca* roads ; 1, 4 and 5 on foot paths as well as *kuccha* or *pucca* roads ; 6, 8 and 9 specially on foot-paths ; 7 on rivers.

Although the means of conveyance were very slow and more expensive than the railways, and the roads were rough in those days, still the traffic was carried for pretty long distances, for instance, shawls, saffron and musk were brought from Kashmir to as distant places as Bangalore.*

We take the following extracts from the admirable work of Romesh Dutt, C. I. E. "The Economic History of India under early British Rule," (London 1906) :—

Bangalore June 1800.

"*Bangalore* had possessed a large trade and extensive manufactures under Haidar Ali. Tipu Sultan had foolishly forbidden all commerce, both with the Nizam's Dominions and with the Karnatic, and the trade of Bangalore had declined; but the place was again rising in importance after the restoration of the Hindu Dynasty. Poona merchants brought shawls, saffron, and musk from Kashmir and pearls from Surat; Burhanpur traders imported chintz and gold lace, cloth and thread; red cotton cloth flowered with gold and silver, came from the Nizam's Dominions; and salt, tin, lead, copper and European goods came from the Karnatic. The exports from Bangalore were chiefly betel-nut, sandal-wood, pepper, cardamoms and tamarinds. A vast quantity of blankets and cotton-wool was also exported.

* Page 205 of Romesh Dutt's Economic History of India 1906, based upon Buchanan's journey from Madras etc (London 1807) Vol. I. page 265 etc.

Patna.—Paper manufacture, leather work, perfumery, iron-work, gold and silver-work, stone-cutting, pottery, brick-laying and lime manufacture, dyeing, blanket weaving and the manufacture of gold and silver thread and cloth were among the other important industries. Much of the internal trade of the district was carried on by *Baldiya-Beoparies* or traders possessing pack-bullocks. One ox and 5 rupees of capital enabled a *Beopari* to start his trade, he sold goods to the value of Rs. 50 a month, making a profit of 6 to 12 per cent., and thus securing an income of Rs. 32 (64s.) a year. Goods were conveyed from Patna to Calcutta by boats and the freight was 12 to 15 rupees (24s. to 30s.) for carrying 100 maunds (8,000 lbs.) of grain. Cartmen conveyed goods over shorter distances and the hire for a bullock cart for carrying 12 to 15 maunds (960 to 1,200 lbs.) from Patna to Gaya (72 miles) was 3 rupees or 6s.*

There are similar accounts of the trade in Shahabad, Bhagalpur, Gorakhpur, Purniya at pages 243, 246 and 254 respectively of the book.

In his note dated 31st July 1828 on the subject of an experimental steam navigation between Calcutta and Allahabad, H. T. Prinsep, the then Secretary, wrote: "there was no river in the world, except those of China, on which there was so large a navigation as on the Ganges. Thirty thousand boatmen found their livelihood on that river as far back as 1780, and the number had since increased. Every body has been struck by the constant succession of boats moving up and down the river, never appearing for a moment, altogether clear; and as this is nearly the same at all seasons and in all places, it leaves an impression of the extent to which this magnificent stream ministers to the wants of commerce and of the traveller, such as defies the attempt at computation."¹

We find the following account of the external trade of India at pages 202-205 of Vol. I of Constable's Oriental Miscellany

* Page 236 of Dutt's Economic History of India 1906.

¹ Pages 310-11 of *Ibid.*

1891, "Berniers Travels in the Mugul Empire" A.D. 1656-1668 :-

"Indian owned vessels which sailed to foreign countries with Indian goods to Pegu, Tanasserim, Siam, Ceylon, Assam, Macassar, the Maldives, Mozambique, and other places. They brought back to India precious metals (gold and silver), which came largely also from Moka, Bassara, Bandar Abbas, Japan. The imports into India consisted of copper, cloves, nutmegs, cinnamon, elephants, lead, broad-cloths from France, horses from Usec, Persia, Arabia, Ethopia, fresh fruits from Afghanistan, etc.

The manufactures of India, which went to foreign countries, included carpets, brocades, embroideries, gold and silver cloths, various sorts of silk and cotton goods.

Gold and silver after circulating in every other quarter of the globe, came at length to be swallowed up, lost in some measure, in Hindustan. From America it went to Europe, a part to Turkey, to Persia, from the last two it came to Hindustan.

From the statistics collected by Mr. (subsequently Sir) Macdonald Stephenson, founder of the East Indian Railway, in 1845, "It was calculated that without any increase of the existing traffic then forwarded by river and road, a large dividend might be looked for."*

The river transport was quite efficient to meet the requirements of the people. Among the promoters of the East Indian Railway, serious doubts were entertained as to probable success of the Railway. Some of them "held natives would not travel by railways, and that there was little need in a country like India which had river transport available, to construct a rail-road for the movement of merchandise, which they held could not be carried by rail as cheaply as by river or road, while speed was no object"†.

Large amount of traffic is still being carried by native crafts along the Western Coast of India between Bombay and Surat, Broach, Cambay, Dholera, Porebandar, Malabar, etc; notwithstanding

* Page 3 of History of the E. I. Railway by Huddleston, Thacker Spink & Co., Calcutta 1906.

† Pages 9-10 of Ibid.

ing the numerous efforts which have been made by the Railway Administrations to kill that traffic. Similarly, there was river competition with the East Indian Railway for traffic between Howrah and the stations on the Ganges up to Buxar, 411 miles by the Chord line. Statistics of traffic carried in olden times are not available. The writer of these lines had the benefit of conversing about the year 1880 with an old peasant of Oudh, who in his leisure months used to carry goods in his bullock-cart from Cawnpore to Koel (Aligarh) and back during the pre-rail period. The peasant with a deep sigh narrated how he and thousands of his fellow-workers had lost their livelihood by the advent of the Iron-horse. He mentioned the large number of bullock-carts, Ekkas and boats that were plying in those days, but were completely stopped by the rail-road, to the ruin of numerous people who made their living by that business. The accounts which he narrated in his rustic-unpolished-manner, coincide with what the writer has seen on the Rawalpindi-Srinagar Road, where no rail-way has yet been made. During the first trip which he made to Kashmir in the summer of 1883, when there was only a bridle-path beyond Murree, passengers had either to walk or ride a pony; the former being highly enjoyable, passing through lovely mountain scenes, covered either with white snows or with green verdure, which looked like velvet from a distance. Most of the travellers who possessed vigour and energy preferred that mode, while goods and merchandize were carried laden on camels, bullocks and donkeys. Apples from Kashmir were carried on the backs of Kashmiri men, each of whom took a load of 1,000 apples packed in a round wicker basket (Dali as they call it) about 5 feet high by 15 inches in diameter, weighing about 250 lbs.

Wheeled machine was totally unknown in that country in those days. Since then those conditions have been considerably changed with the construction of the metalled wide Road along the Jhelum Valley. And most of the traffic both passenger and goods, is now carried on wheeled vehicles. The following is a summary of trips made by vehicles during the year 1918-19:—

	Up.	Down.
Motor Cars.	3,144	3,112
Phaetons.	40	41
Tongas, one horse.	780	775
Ekkas and Tum-tums.	7,982	7,192
Bullock-Carts. ,	15,984	16,875

Now thousands of people work this traffic and earn their living, giving valuable manure to the land-owners on the way where they halt for the night, and buying the produce of their land, especially grain and fodder. If a railway line be constructed there, all the workers of the road traffic, would lose their business; while on the length of 200 miles some 20 stations would be opened, where 100 clerks and 400 other men would be employed.

The general public in Kashmir, would have to face a general rise in prices, and the poor people who at present enjoy some of the cheap fruit which cannot be exported at present, would certainly lose even that, when the railway would carry it down in wagon loads. The land-owners and producers of merchandise would get higher prices for their goods, but it is more likely that this increase in their income would be swallowed up by the general rise in prices which is sure to follow, when the country is brought under the direct influence of world prices, a result which has caused perpetual dearness in the plains of India.

The example of Kashmir is so instructive that it brings out vividly what has been obliterated by the course of events in the plains of India. As the pre-rail conditions in the plains have disappeared and the present generation has no idea of them, the present conditions of Kashmir furnish us with a valuable data for realizing the effects of the rail-road introduction in India.

In the nineties of the last century, there were 33,870 boatmen and 2,417 boats in Kashmir, excluding boats owned by private persons.¹

¹ Pages 380-81 of the "Valley of Kashmir" by Walter R. Lawrence, I.C.S., C.I.E., 1895.

The number of boats rose to 4,778 in 1919 classed as follows:—

House Boats.	654
Dongas.	651
Shikaras.	886
Khuchchus.	2,587

Total 4,778

The total imports and exports between the Punjab and Kashmir and between the Punjab and Ladakh during the year 1892-93 were as follows:—

		Panjab.		Ladakh.	
		Mds.	Value Rs.	Mds.	Value Rs.
Exports	...	1,818,825	53,33,092	8,938	3,22,413
Imports	...	498,867	48,68,247	4,155	2,16,141
Total†	...	1,317,692	1,02,01,339	13,093	5,38,554

The exports and imports between the Punjab and Kashmir in 1918-19 were:—

	Mds.	Value Rs.
Exports Merchandise.	1,305,214	1,08,98,757
„ Treasure.	...	9,00,122
Imports Merchandise.	466,213	96,01,497
„ Treasure.	...	35,81,779

The principal commodities are cotton manufactured, tea, salt, sugar, tobacco, metals among the Imports; and Silk raw and cocoons, timber, fresh fruit, ghi, woollen cloths, and Kuth-root among the Exports.

SECTION 10.—Gauges of Railways.

The original proposals as regards the gauge were for a 4ft. 8½in. width. But at that time there was a 7 ft. gauge on the Great Western Railway in England, which had many adherents, and it was con-

sidered that it would be as well for India to adopt the common gauge in Europe or something between 4 ft. 8½ inches and the 7 ft. Mr. W. Simons, C. E., Consulting Engineer to the Government of India for railways, advocated a 5 ft. 6 in. gauge on the ground that it would give 9½ in. more space for the arrangement of the several parts of locomotive engines and also that the lowering of the centre of gravity would lessen lateral oscillation rendering the motion more easy and pleasant and would also be of great importance in preventing overturning in storms of wind. The Court of Directors accepted the 5 ft. 6 in. Lord Dalhousie advocated 6 ft. but eventually the Court of Directors adhered to their opinion which was finally accepted (Horace Bell's "Railway Policy in India").

The metre-gauge was introduced in India when the Government decided to build cheap railways through the agency of the State in 1869. The first Indian State Railways, such as the Rajputana, the Northern-Bengal, the Indus Valley (Lahore to Rohri), and the Panjab Northern (Lahore to Jhelum) were started on this gauge. The Panjab Northern was opened in 1873 on metre-gauge and converted into the 5 ft. 6 ins. gauge in 1878 and the Indus Valley was only partially constructed on the metre-gauge but opened as a Broad-gauge. They now form part of the North-Western Railway System.

The 2 ft. 6 in. and 2ft. gauges have been adopted for short railways to serve local areas. The main lines of Indian railways are on the 5 ft. 6 in. gauge, which is styled as the standard gauge for India, while the metre-gauge system is quite as extensive as the other. It has only two small gaps between Khandwa and Hugi to effect a through metre-gauge communication between Madras and Sadiya in Assam, passing through Rajputana; the United Provinces and Bengal, while a through communication with the latter Provinces already exists to and from the Western Coasts of Kathiawar and from Sindh Hyderabad.

The history of the gauges of the Indian Railways is fully narrated in Chapter IV of Mr. Horace Bell's "Railway Policy in

India," and in the Administration Report on Indian Railways for 1880-81. Paras. 313-331 of the Report by Mr. Thomas Robertson, C.V.O., deal with the economic merits of the several gauges. Compared with the 4 ft. 8½ in. of the European and American gauge, the rolling-stock of the 5 ft. 6 in. gauge in India is insufficiently wide and loses "about 22½ per cent. of power"; "from an economic point of view", it "is not so good a servant to the country as the metre-gauge" (para. 316). The width of vehicles compared as under:—

	Gauge.	Width of Vehicles.
England.	4 ft. 8½ ins.	8 ft. 6 ins.
America.	4 „ 8½ „	10 „ 0 „
Europe.	4 „ 8½ „	10 „ 6 „
India.	{ 5 „ 6 „	9 „ 6 „
	{ 3 „ 3½ „	7 „ 9 „

To be relatively equal in width to the stock on the Continent, the Indian 5 ft. 6 in. gauge vehicle would need to be 12 ft. 3 ins. wide.

SECTION 11.—Public Wants and Complaints.

Since the seventies of the last century, the public in India have been complaining in the press and on the platform of the discomforts and inconveniences to which Indian passengers of the third and Intermediate classes are subjected. The railways at first were in charge of Companies, whose attention was drawn by Government from time to time to those complaints. The Companies, under the lame excuse of economy, have been ignoring the pressing requirements of Indians. Although the Government lines have been more liberal in meeting public requirements, yet they too, under the autocratic powers, have in many cases followed the examples of the Companies' lines. The complaints have been very loud and the failure of the railways to meet them would not have been tolerated in any other country.

The complaints chiefly refer to the following:—

- (1) Overcrowding of railway carriages.
- (2) Insufficiency of trains run.
- (3) Use of cattle trucks and goods wagons for pilgrim passengers.
- (4) Absence of latrine in 3rd class carriages; or unsuitable design of latrine latterly provided.
- (5) Absence of any arrangements for meals.
- (6) Uncomfortable Waiting Halls.
- (7) Difficulties in obtaining tickets.
- (8) Late admission of passengers on platforms, causing great crush and rush for seats.
- (9) Use of iron-barriers preventing free passage of passengers at station entrances.
- (10) Absence of Intermediate class on trains.
- (11) Insufficient arrangements for supply of proper drinking water.
- (12) Bribery and exactions at stations.

The overcrowding of passengers on Indian Railways is directly due to the insufficient number of trains which the railways generally run in this country. This overcrowding is daily witnessed on Indian railways. It needs no demonstration, but to emphasise the point, it may be mentioned that the late Sir Alexander M. Rendel, Consulting Engineer for Indian Railways, made a comparison of the Indian railways with the English railways, before the Select Committee of the House of Commons in 1884. He stated that owing to the absence of competitive railways in India, Indian railways were *running very few trains*; whereas in England the railway companies met competition by providing greater facilities and “doubled or quadrupled the spaces actually required for the passengers carried” (para. 5757 of the Evidence). In England if trains of one line were overcrowded, the people have other lines between the same places to travel by, and would use the trains of other railways where there is no overcrowding; while in India such competitive lines have

been carefully avoided and in most of the cases the people have not the benefits of competitive routes. In comparing the East Indian Railway with the London and North-Western Railway, he said, both of them carried an equally large amount of traffic, but the E. I. Railway "was running *very few trains*" which "were very full," that on an average the number of passengers in a train on the London and North-Western Railway was not more than 50, while on the E. I. Railway it was 260 or 270. Mr. Thomas Robertson, C.V.O., in paras. 165 and 173 of his Report of 1903, stated that the "average number (154 to 267) of passengers in a train (in India) is greater than any other country in the world," that "the third class carriages are often much overcrowded" and for long journeys. These facts and figures clearly show how meagrely Indian people are served by the railway administrations in India. While in England scores of trains are daily run up and down, in India we have hardly more than four through passenger trains a day in one direction even on the trunk lines. This economy in the working of Indian railways is at the sacrifice of all comforts and conveniences of the third class passengers. If our railways ran a sufficient number of trains to meet the heavy traffic, there would be no overcrowding; but taking advantage of the war conditions in 1917, the Indian Railways made a reduction in the already meagre service which they were giving before the war. It is high time now that the matter should be taken up strongly and the railway administrations compelled to run sufficient trains to avoid overcrowding. Any company failing to comply with this requirement should have its contract terminated for unsatisfactory working.

The number of passengers carried in railway carriages in India is generally very high. It is often in excess of what is fixed for each compartment or carriage. Even in fixing the maximum capacity of the carriages, the railway administrations have one set of figures for ordinary passengers and another set for soldiers. The people do not see why this distinction should be made in the same class of passengers, except that the military authorities are

strong enough to secure a fair consideration for their men from the railway administrations.

As an instance of the liberal manner in which public wants are met in Europe, I would cite a case of the Italian State Railways, while I need not mention the excellent train services in other Continental countries and in Great Britain and Ireland.

In May 1914, I took a train at 6 a.m. from Menaggio on the branch connecting the Como and Lugano Lakes *via* Porlezza, through a mountainous country. It is a short branch of 2½ hours journey but had no less than six trains daily each way, although the traffic was very little. The train, by which I travelled that morning, was composed of three four-wheeled carriages and an Engine. It started with only three passengers, while three others got in on the way, two of whom were school-boys going with their books to the school and the other three took their farm-produce, cherries, cheese, eggs, etc., for sale to the market. On seeing this light train, I was greatly impressed with the considerate management of the Italian State Railways.

Will the Indian State Railways ever run such light trains to meet the requirements of the people?

The Chairman of the Railway Board once put forward the lame excuse of railways that they cannot be expected to provide the large number of carriages occasionally required for short periods in a year. It was astonishing that a responsible officer of Government, who was actually paid by the people to look after their interests, should put forward such a lame excuse. The writer witnessed an exceptionally large influx of passengers in London—larger than ever carried to pilgrim centres in India—on the occasion of the Coronation of Their Majesties King George and Queen Mary in 1911. But no wagon stock was employed in England for those extremely large numbers of people who came from all parts of Great Britain and Ireland.

The Chairman of the Indian Railway Board referred to the sudden risings of pilgrim traffic in India, but has the Railway Board ever considered the inadequacy of trains *daily* run on In-

dian Railways for the regular requirements of Indian passengers, who are always inconveniently packed up on all occasions. If sufficient carriages and trains were provided for the daily requirements of passengers in India, if the railways were less exacting from the unfortunate third class Indian passengers, there would be sufficient carriages in the country to meet occasional wants of pilgrim-fairs-traffic. The Indian railways have been open for 67 years and it is surprising they have not yet been able to meet the well-known recurring requirements of Indian pilgrims.

Some of the Railway authorities at times urge that the third class fare in India is so low that it is not possible to give any better accommodation for that class. True if we took the nominal value in the currencies of the various countries, but if we took into account the buying power of those currencies in their respective lands, the rates of Indian fares would not compare unfavorably. Moreover, we have the authority of the late Sir Juland Danvers that on the Metropolitan lines in England, the third class fare was as low as $1\frac{1}{2}$ pie per mile, while Mr. Thomas Robertson concluded that the average third class fare in India in 1902-03 was about 40 per cent. higher than that in England, where the third class carriage is better than the first class in India. The first duty of the Indian railways is to provide improved carriages for third class passengers, secondly, to reduce the maximum number of passengers put in them to the same figures as have been fixed for military passengers, thirdly, to run more trains in order to avoid overcrowding of carriages.

During the recent years, we have been repeatedly told that the train service has been cut down owing to shortage of rolling stock, but on looking through Appendix 17 of the Administration Report for 1919-20, we find a shortage in metre-gauge engines only, while both the coaching and goods vehicles on 31st March 1920 were more than on the corresponding date in 1915.

The figures compared as follows:—

Engines.		1915.	1920.
5'—6" gauge.		5,595	5,991
3'—3 $\frac{3}{8}$ " "		2,497	2,607
2'—6" "		290	369
2'—0" "		78	101
Total		8,460	9,068
Coaching vehicles. —			
5'—6" gauge.		12,681	13,527
3'—3 $\frac{3}{8}$ " "		8,786	9,318
2'—6" "		1,097	1,418
2'—0" "		402	441
Total		22,966	24,704
Converted into 4-wheeled units.		32,343	33,262
Goods vehicles.—			
5'—6" gauge.		126,909	136,736
3'—3 $\frac{3}{8}$ " "		54,493	53,831
2'—6" "		3,938	4,746
2'—0" "		856	1,434
Total		186,196	196,747
Converted into 4-wheeled units.		188,416	200,414
Total number of axles.—			
Coaching vehicles, all gauges.		64,686	66,524
" " 3'—3 $\frac{3}{8}$ " gauge.		51,104	52,478
Goods vehicles, all gauges.		376,832	400,828
" " 3'—3 $\frac{3}{8}$ " gauge.		109,952	108,728

The demand for additional rolling-stock needs a very careful scrutiny. The railway administrations should show that the stock already provided is fully and properly utilized. A large saving in the number of stock is possible by increasing the speed of trains and by working the traffic by the shortest route. Every vehicle placed on the rails, whether worked or not,

deteriorates by climatic effects, and adds to the working expenses in the way of cleaning, lifting, oiling, and packing of axle-boxes, etc. We have not sufficient data before us to discuss these details. The Railway Board should call upon each administration to give the necessary data and to make out a conclusive case, as regards the stock of various types required for the different kinds of traffic. The Board should also arrange to complete the standardization of rolling-stock and of its various parts and fittings, so as to facilitate repairs while stock of one line is running on another line.

The accommodation for the third class requires two improvements, viz. :—

(1) More space per passenger in carriages.

(2) Provision for sleeping.

Item (1) was offered by the Agent, E. I. Railway, in para. 10 of his No. 952 G. of 31st December 1879, while item (2) was recommended by the Consulting Engineer, Ccutta, in his No. 646, dated 14th February 1880. An excellent design of a third class sleeping car was designed on the Norwegian State Railways in 1913.

Mr. Thomas Robertson made the following remarks and recommendations in 1903 :—

“172. *Carriages.*—The accommodation provided for the conveyance of passengers is as good as the construction of the present vehicles will permit, but having regard to the nature of the climate, much remains to be done to secure satisfactory public transit, *especially with respect of the third class traffic, the present arrangements in connection with which cannot be regarded as at all satisfactory.*”

“In fact it would almost seem that the railways in India were insufficiently appreciative of the value of their third class passenger traffic. The less paying first and second class traffic appears to receive all the attention ; whereas the traffic which really needs to be fostered is that represented by third class passengers, who are the backbone of the passenger business of every railway in India.”

"173. The system of conveying pilgrims in goods wagons, at all events to such a large extent as at present also points to the same absence of proper facilities for the traffic."

"Generally speaking, the amount of stock provided on the trains for the 3rd class traffic is inadequate and the treatment to which 3rd class passengers are subjected in India calls for very special attention."

"228. All new passenger vehicles should be provided with lavatory accommodation in the third as well the higher classes, and the existing lower class carriages travelling on all but short distance trains should be fitted with lavatory accommodation as soon as can be conveniently arranged. I received numerous complaints of the great inconvenience suffered from the absence of this accommodation."

The italics are ours. As regards the number of classes of carriages provided on public trains, the Indian railways have generally had four different classes, viz:—

1st, 2nd, Inter. and 3rd, or 1st, 2nd, 3rd and 4th Classes.

Majority of the middle class Indians prefer an Intermediate Class and it is wisely provided on most of the principal railways, viz:— East Indian, Eastern Bengal, O. & R., G. I. P., Nizam's Guaranteed, Assam-Bengal, Rohilkhand & Kamaon, B. & N. W., Bengal-Nagpur, Jodhpur-Bikaner. The only exceptions are the B. B. & C. I., Madras & S. M., and South Indian Railways, which have only three classes. The provision of the Inter Class with an improved accommodation at a fare of 4½ pies per mile would admirably meet the requirements of the middle class Indians.

Mr. Thomas Robertson dealt with the question of classes of accommodation provided on Indian Railways, in para. 229 of his Report. The average number of passengers of the different

classes in each train in 1901 he gave:—

	1st.	2nd.	Inter.	3rd.	Season tickets.	Total.
Broad Gauge.	1.48	5.45	13.64	173.65	4.56	198.78
Metre Gauge.	0.88	3.45	3.59	217.37	0.63	225.92
Broad & Metre.	1.31	4.86	10.65	186.66	3.39	206.87

These figures show that if any of these classes was to be abolished, it was the 1st class which is so little used.

In 1910 there was no difference either in the interior accommodation or in the seating capacity of inter and 3rd class carriages on the E. B. S. Railway and the M. & S. M. Railway. Cushions were however provided in the Inter class on the E. I., B. & N. W., R. & K., and N. W. Railways.

The first two lines had also sleeping berths in their Inter class carriages. The Carrying Capacity, for Inter and Third class was alike. On the B. & N. W., E. B. S., R. & K., and M. & S. M. Railways on the E. I. Railway it was 3 Inter. to 4 Third class, on the O. & R. Railway, 44 Inter to 58 Third class, and on the N.-W. Railway, 34 Inter to 42 Third class or 20 inches Inter and 18 inches Third class per seat.

The N.-W. Railway provided also better fittings for the lavatories of their Inter class carriages.

On the B. B. & C. I. Railway the same carriages were used for both the Inter and third class passengers and the seating space was also the same for both the classes. During the recent years, the Inter class has been totally abolished on this railway.

Latrine in Third Class Carriages.—Orders for the provision of latrine accommodation in 3rd class carriages were issued by the Government of India from the earliest times. But the railway administrations evaded them on lame excuses, such as:—

- (1) Difficulty of keeping the carriages clean,
- (2) Pollution of the line and difficulty in getting permanent way gangs to work on the line.
- (3) Pollution of station yards, and difficulty to prevent passengers from using carriage latrines at stations.

- (4) That latrines were unnecessary, as the average journey of a 3rd class passenger was only 41 miles and the average fare, 8 annas one pie.
- (5) That one-fifth of the seating space would be lost if latrines were provided in carriages having lateral compartments. To make up this loss, the 3rd class fares would be correspondingly increased.

(6) That passengers should use masonry latrines at stations. Such were the arguments used by the Law-Member, the Hon'ble (afterwards Sir) Andrew Scoble, and the Public Works Member, the Hon'ble Sir Charles Elliot, in the Viceregal Council, when the Railway Bill was introduced on the 25th October 1888. The present writer in an article in the Hindi Daily "Hindusthan" of Kālakānkar dated Friday the 10th January 1890, answered the above arguments, as follows:—

That the average journey and fare did not represent the inconveniences of the *long-distance-passengers*, that the averages included the large number of local and suburban passengers who did not need latrine accommodation, that the lateral compartment carriages might be replaced by End-opening or Longitudinal-seat carriages, which did not require as much as one-fifth of the space for a latrine.

The cost of working and profits on the two railways for the year 1887-88 showed the following results:—

	E. I. Railway.				O. & R. Railway.		
	1st.	2nd.	Inter.	3rd.	Upper.	Inter.	Class.
Average receipts per carriage in pies per mile.	17-17	21-03	25-44	56-05	13-20	12-60	66-27
Average cost of hauling a coach one mile in pies.	11-77	11-77	11-17	11-77	14-89	14-89	14-89
Average profit on working a coach one mile in pies.	5-40	9-26	13-67	44-28	—1-69	—2-29	+51-38

On the E. I. Ry., the 3rd class profits were eight times more than those of the 1st class. While the Upper and Inter classes on the O. & R., were running at a loss, the Lower class gave a large profit of 51 pies per carriage per mile. Even if one-fifth of the seating space were needed for latrines, still the profits from the 3rd or Lower class would be ample.

Many passengers travelled continuously for more than one day, and on fast trains there was no time for them to ease themselves even at stations. It was shown that passengers were often falling out of trains, while attending to calls of nature at the carriage window during the travelling of trains. The following figures of such accidents were given from the Returns published by Government for the year 1888:—

	Killed.	Injured.
During 1st quarter of 1888	1	19
" 2nd "	2	16
" 3rd "	3	20
" 4th "	6	14
Total in the year	12	69

This and similar other representations from the country after all moved the Government of India, who issued the following orders on 26th February 1902:—

1. In the Government of India Circulars Nos. 14 Railway and 7 Railway dated, respectively, the 10th July 1895 and the 19th October 1896, measures were indicated for the provision of facilities in regard to latrine accommodation to passengers travelling by railway in the third class.
2. Complaints, however, continue to reach the Government of India that the inconvenience and hardships experienced by such passengers have in no way abated, and it is represented that the introduction of fast trains running for long periods without halting, and only then stopping for a very limited time, has aggravated the grievance.
3. That the grievance is a very real one cannot be disputed, and the Government of India are of opinion that such passengers are entitled to greater consideration in the matter of latrine accommodation than has hitherto been accorded them. The intermediate and third class passengers contribute by far the largest portion of the receipts derived from passenger traffic, and their comfort should be regarded as a matter of the first importance.

4. The objections which have hitherto been advanced to the general provision of latrine accommodation in the lower class carriages, while entitled to consideration, are not held to be sufficient to justify the postponement of the only step which can satisfactorily overcome the difficulty under which the lower class passengers labour. In recognition of the claims of this class of passengers His Highness the Nizam's Guaranteed State railway has provided latrine accommodation in all the third class stock on the recently constructed Hyderabad-Godavery railway, and is gradually fitting up all the carriages on its broad-gauge line with similar accommodation. The Southern Marhatta railway also has fitted, or is fitting up with latrine all stock running on mail trains.
5. The example here set, the Government of India consider, should be followed on every railway in India, and I am directed to request that the administrations of the railways under the control of the Local Governments may be invited to take steps for the provision of latrine accommodation :—
- (a) as early as possible in all intermediate and third class carriages running on mail and fast passenger trains, that is, trains which are not timed to stop at every station; and
 - (b) as opportunity arises in all other carriages of these classes except those intended for use on suburban trains running for distances of less than 50 miles.

I am further to request that steps may be taken for the provision of such accommodation in all carriages of these classes which may hereafter be built.

6. In conclusion I am to ask that the Government of India may be advised in due course of the steps taken, or which it is intended to take, to remove the grievances complained of.

The Indian public have been constantly complaining of latrine accommodation now provided in 3rd class carriages, which is a perfect nuisance. The railway administrations in India practice economy in the accommodation for the 3rd class but they spend lavishly on the 1st class that seldom pays the expenses. The people, who pay most of what the railways earn from passenger traffic, are denied the commonest requirements. They have been crying for the last half a century for a suitable design of latrine for the 3rd class. The railways at first evaded the provision on various

excuses but since this accommodation is required under the law introduced from 1890, they have provided it in a very stingy manner. The economy here is in the space utilized for latrines in the 3rd class. The total space generally allotted in a carriage is 3 or 4 feet square. How could we have a satisfactory latrine used by scores of persons within that space. No mechanic could be expected to make a suitable design unless the space allotted is sufficiently increased.

There is no provision for washing. The design of latrine should be made according to the Indian style and more room allowed, with necessary provision for washing and keeping the place clean.

Waiting Halls.—The accommodation provided at stations in the way of waiting rooms or sheds for the 3rd class is worse than anything which the people are accustomed to have even in their poorest dwellings. They are made to sit on dusty floors, in large crowds, in the heat of May and June, under roofs covered by corrugated iron sheets only. There, they have to wait for several hours before they are admitted to the platform. Thick crowds are often seen standing under these hot sheds with perspiration running from their foreheads. We can very well imagine their sufferings which need an effective remedy.

Arrangements for refreshments for Indian Passengers on Indian Railways.

The arrangements at present in force on most of the Railways in India are far from satisfactory, owing partly to caste prejudices of passengers and partly to want of proper organization on behalf of the Railway Administrations. The result is that railway travelling in India involves serious discomforts to a very large majority of Indian passengers of all classes and communities, viz:—Hindus, Mohammedans, Christians and others, who cannot partake of meals provided on the European system.

In Europe where competition between Railway administrations for passenger traffic is keen, those administrations take every possible care to secure and provide all sorts of comforts, in

order to attract passengers to their individual lines. In India the Railways do not generally compete for passenger traffic and consequently they do not care to provide due comforts for the travellers. At times passenger traffic on Indian Railways is so great that even proper carriages are not provided for their conveyance. It is, however, the duty of Government to see that reasonable facilities are provided for the requirements of all classes of passengers.

It is true that Refreshment Rooms for European and Anglo-Indian passengers are provided at important stations on all the Railways, and some of the Railways run dining cars on their fast trains; but very little attempt has been made to provide similar Refreshment Rooms for the large majority of Indian passengers who do not take European food. The few Indian Refreshment Rooms which have been latterly opened, suffer from mismanagement and hardly meet the requirements. To meet these requirements, the railways in India have to make proper arrangements under two main heads, *viz* :—

- (1) For Hindus, and
- (2) For others.

Hindus who form a very large majority are at present the greatest sufferers, owing to their caste prejudices. To them travelling by rail is a serious discomfort when it takes more than 12 hours in a train. Many of them make long journeys at a time, and the wonder is that they quietly bear all the discomforts. While travelling by rail, a Hindu has to eat either stale food taken from his home or to buy on the journey articles like *Puries*, sweets, parched grain, fruit, milk, etc., which alone are to be had from the vendors allowed by the railways to sell at the stations. Articles of daily food like rice, bread, dāl, curry, vegetables, etc., prepared by a proper cook, are not to be had at the stations either for love or for money. Mohammedans and poorer classes of Christians do get articles of the latter kind at some stations but they are of a very low quality and hardly meet the requirements of respectable members even of those communities.

If suitable arrangements for proper meals of Indian passengers be made, railway travelling in India would certainly become more popular.

The experiments made, over ten years ago, on the E. I., E. B. and Bengal-Nagpur Railways, with Indian dining cars, did not provide for what was wanted, and as such they were bound to fail. To attribute their failure to caste prejudices is not at all correct. On the Rajputana Malwa Railway, three compartments each measuring 4 ft.—6 $\frac{3}{8}$ ins. long \times 8 ft.—3 ins. broad, in a bogie carriage were fitted up, one for Hindus and one for Mohammedans, the middle one being used as a common kitchen for both, with

4 Sigrees (*angithies*),

2 Almirahs,

2 Serving shelves,

2 Sinks 1 ft. 3 $\frac{1}{2}$ ins. each.

Each of the side compartments was provided with two basins, one at each end corner, for washing purposes, with one shelf in the centre and 4 clothes pegs. The cost of fitting each set of three compartments was Rs. 500 only. The compartments were too small both for cooking food and for serving passengers, and consequently they did not meet the requirements of the people.

The first and foremost need is the provision of commodious Refreshment Rooms at important stations, separate for Hindus and for Mussalmans and others, somewhat larger than those provided for the few European and Anglo-Indian passengers. This would no doubt involve some outlay but it is absolutely necessary and Government should direct the Railway Administrations to meet it ungrudgingly. The caste distinctions among the Hindus are dying out and with orthodox arrangements with Brahman cooks and vegetarian meals—both *kuchcha* and *pucca*—it is more than probable that all classes of Hindus will gladly use them; while Mohammedans, poorer classes of Christians, Parsees, etc., will find it a blessing to have fresh meals provided after the Indian style.

Separate Rooms being provided for both, contracts may be let out to respectable persons who have a reputation and will make efficient arrangements at a moderate scale of charges.

During the annual sessions of the Indian National Congress, arrangements as described above are successfully made for the catering of thousands of all castes of Hindus, Mohammedans and others.

At first the refreshment rooms may not pay unless the platform vendors are kept out. The vendors are unsatisfactory and better arrangements are badly needed; great improvement has of late been made in the way of fly-proof net covering, but the quality of food remains as unsatisfactory as ever before. If they are to be allowed, stricter conditions should be made to ensure wholesome food at moderate rates. The fees at present levied from the vendors should be abandoned and licenses should be given free to a reasonable number of good suppliers only. The following are the lists of vegetarian *kuchcha* and *pucca* meals, which will suit majority of the Hindu passengers:—

<i>Kuchcha.</i>	<i>Pucca.</i>
Rice,	Purí,
Dál,	Kachaurí,
Chapátís,	Vegetables,
Vegetables,	Pickle,
Pickle,	Pápar,
Pápar,	Kheer or Halwá,
Curd or Milk with Sugar,	

For Mohammedans, we give the following from the G. I. P. Railway Tariff (Appendix B vii page 198 of the *Gazette of India* Part VI, March 9th 1918):—

<i>Break-fast.</i>	<i>Break-fast.</i>
First Class (Re. 0-9-0).	Second Class (Re. 0-6-0).
2 Paráthás.	4 Chapátís.
1 Plate Puláo.	1 Cup Qormá.
4 Kabábs.	1 Plate rice and curry.
1 Cup Salán (Qormá).	1 Plate Kheer.
1 Plate Kheer.	

Dinner.

First Class (Re. 1-0-0).

- 2 Paráthás.
- 4 Chapátis.
- 1 Plate Puláo.
- 1 Plate chicken curry.
- 4 Kabábs.
- 1 plate rice and curry.
- Some sweet or fruit.

Dinner.

Second Class (Re. 0-12-0).

- 4 Chapátis.
- 2 Paráthás.
- 1 Cup Qormá.
- 1 Plate rice and curry.
- 1 „ Puláo.
- 1 „ Kheer.

We are glad that the Bengal-Nagpur Railway have, recently, under their direct management, arranged for Indian meals at Kharagpur and other junctions. It has been arranged that the Indian catering section should have no connection with that for Europeans, the managers and the staff for these works in two different restaurants, being quite independent of each other. In the Indian catering department Brahmans and high caste Hindus are employed to serve Hindu passengers; whereas Mohammedans have altogether separate arrangement.

In 1918 the Railway Board published* the result of the enquiries, they made upon a complaint preferred by Mahátmá M. K. Gandbi, which showed that, although a good deal had been done by the railways in these matters, there was still room for improvement. The Board accordingly requested the Senior Government Inspectors to give further careful attention in their inspections to the conveniences provided for 3rd class passengers, especially as regards general arrangements for dealing with the traffic, booking and waiting accommodation, refreshment arrangements, latrines and the general sanitary condition of the same.

The orders issued by the Board were not sufficient to remove the complaints and we draw the attention of the authorities to the wants above set forth.

Many of the short-comings of the Indian Railways are due to unacquaintance of the European officials with Indian needs and requirements. Whether we take the designs of carriages, or

*Pages 188-206 and 1157-62 of the Gazette of India Part VI of 1918.

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<i>Kuchcha.</i>	<i>Pucca.</i>
Rice,	Púrí,
Dál,	Kachaurí,
Chapátís,	Vegetables,
Vegetables,	Pickle,
Pickle,	Pápar,
Pápar,	Kheer or Halwá,
Curd or Milk with Sugar.	

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4 Kabábs.	1 Plate rice and curry.
1 Cup Salán (Qormá).	1 Plate Kheer.
1 Plate Kheer.	

Dinner.

First Class (Re. 1-0-0).

- 2 Paráthás.
- 4 Chapátis.
- 1 Plate Puláo.
- 1 Plate chicken curry.
- 4 Kabábs.
- 1 plate rice and curry.
- Some sweet or fruit.

Dinner.

Second Class (Re. 0-12-0).

- 4 Chapátis.
- 2 Paráthás.
- 1 Cup Qormá.
- 1 Plate rice and curry.
- 1 „ Puláo.
- 1 „ Kheer.

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*Pages 188-206 and 1157-62 of the Gazette of India Part VI of 1918.

arrangements for the supply of meals to railway passengers, the defects mainly point to that cause. Nobody need be surprised at such glaring errors, for did not they originally mistake that Indians would not travel by railway train?

In the Despatch which the Court of Directors addressed to the Governor-General on the 7th of May 1845, the following argument was put:—

“According to the experience of this country (England), by far the largest returns are procured from passengers, the least from the traffic of goods. The condition of India is in this respect the reverse of that of England. Instead of a dense and wealthy population, the people of India are poor, and in many parts thinly scattered over extensive tracts of country; but on the other hand, India abounds in valuable products, of a nature which are in a great measure deprived of a profitable market by want of a cheap and expeditious means of transport. It may therefore be assumed that remuneration for rail-roads in India must, for the present, be drawn chiefly from the conveyance of merchandise, and not from passengers.”*

“The ignorance or inaccuracy displayed in this statement,” wrote Mr. Horace Bell, “is very striking, more especially if it is borne in mind that this first railway proposal (about the E. I. Ry.) was to traverse one of the most densely populated territories in the world, which at a moderate computation, must then have had a population on the average exceeding that of England to the square mile.”*

This belief continued until in the Parliamentary Report on the Indian Railways for 1861-62, the Government Director wrote that by the Traffic Returns, the point was “unquestionably proved that the people of India are similar to the people of every European country in their disposition to travel.”

In his History of the E. I. Ry. (page 16), Mr. G. Huddleston, C. I. E., has written that gloomy anticipations about the traffic to

* Pages 3 and 4 of “Railway Policy in India” by H. Bell.

be carried by the railway in India were made by parties whose acquaintance with India was of a rather ancient date. They were apprehensive that the prejudices of the Indians would prevent them travelling by railway. Prolonged experience has shown that the Indian likes to travel as fast as he can be carried, and at the present time there is no better proof of this than the preference given to the recently introduced third class express trains over the slow passenger trains, but it took many years to recognize this, and it was not until 1897 that 3rd class passengers were first admitted to the mail trains below Allahabad on the E. I. Ry. and not until 1905 that express trains were first run for lower class passengers."

The failure on the part of the railways to meet the requirements of the Indian public, shows the pressing need of Indianizing the higher posts on the railways. To say that a very large majority of the railway servants are Indians is misleading; for these servants have no power or share in the policy pursued by the railway administrations. Most of the complaints made against Indian subordinates are due to the higher officials; who are not under the influence of public opinion.

In Europe the requirements of the public are carefully studied and provided by the railway authorities. They run ample trains to meet all possible requirements, and provide necessary comforts for all classes of passengers. One feels no inconvenience in travelling by rail in Europe, whereas a railway journey in India entails hardships which pious pilgrims alone can bear in the hope of attaining salvation in case they die on the pilgrimage, and many of them do lose their lives while making long journeys to Rameswaram or the Ganges, without proper food, and packed up in crowded cattle trucks or goods wagons. The railways make their profits from these pilgrims, but seldom think of their hardships and sufferings. The religious fervour is no doubt at the bottom of the suicidal move on the part of the people, who forget the old saying that there is no piety in making a pilgrimage, unless one goes on his or her own legs. The places of

pilgrimage have virtually lost their sanctity since the visitors number by *lakhs* or thousands, where in pre-rail-days only thousands or hundreds could go. The pilgrims waste their hard-earned savings and undergo untold sufferings, many of them losing their lives, often causing cholera which spreads over distant places and endangers the lives of millions of others. I leave it for the consideration of the thinking pilgrims and religious reformers to seriously consider whether it is desirable to continue the great religious fairs like the Kumbh at Hardwar, Allahabad, Rameshwaram, Puri, and other shrines of the olden times.

While we have drawn attention to the short-comings on the part of the railway administrations, we consider it equally necessary to draw particular attention of the reformers and Indian public generally to the changes necessary in their preparations for travelling by rail.

First requisite for the people is that they should approach the Ticket-window at the stations calmly, not in hurry and confusion. The Ticket Clerk is bound to give them the tickets they want, but by their rush they overcrowd the window and give opportunities to the Policemen to harass passengers. Every one should learn the habit of approaching the Ticket-window by precedence; no body should attempt to go ahead of another person. This disciplinary lesson should be taught in every school to every boy and girl, and members of the *Sevasamiti* and the Police-force should gently demonstrate the efficacy of this discipline at large stations.

The second but more important reform needed among railway passengers is to take with them only such articles as are absolutely necessary for use on the journey. Taking too many articles overcrowds railway carriages and takes up the space which is meant for seating passengers. If one has to take a large kit, the extra articles should be booked and made over to the railway for conveyance in the Luggage-van. If this is properly observed by the public, many of the complaints of exaction made against the railway staff would cease. It is hoped the railway

administrations will compel their staff to convey such luggage ungrudgingly by the train required. In Europe passengers of both sexes take only one small hand-bag which they can themselves carry to and from the carriage. If the railway administrations make proper arrangements for meals and water, passengers would themselves give up the present habit of carrying these articles.

New business —Enterprising people should set up the business of hiring blankets to passengers during the cold weather, as is the custom in Europe. If this be properly organised, it would not be necessary for passengers to carry their bedding in trains. Hotel-keepers should arrange to supply necessary bedding on hygienic principles as is done all over Europe. Private houses accommodating guests should similarly arrange to find bedding for the guests. This involves a change in the present system of life in India.

Pandas at the pilgrim centres should follow the example of Hotel-keepers of Europe, especially Switzerland, who admirably meet the wants of thousands of visitors who go to that beautiful country. If *Pandas* may not do it, this business should be taken up by enterprising educated Indians. It will pay handsomely, and be a boon to travellers.

These matters rest entirely with the Indian public; if they carry out the requirements, it would very largely make the railway travelling smooth and comfortable.

The following two are the typical complaints we often read in the Indian newspapers:—

"Hardships of Third Class Passengers.

"Sir,—For the past few weeks there were rumours afloat that the Indian railways intend to increase their rates. And to-day the Associated Press informs us that there is a conference of railwaymen now sitting at Bangalore to consider, among other things, the increase of fares of third class passengers.

Will they first consider and remedy the untold hardships of

the third class passengers on Indian railways? These, I state from personal observations on all the main lines in India. For third class passengers—

1. There is no comfort at all;
2. Nay, they are packed like sardines;
3. They have often to stand for hours in the passage or sit or sleep on the floors;
4. They have occasionally to travel in trucks like dumb cattle;
5. Upper berths are to be found only in the mail trains—rarely in passenger trains. And on the Poona-Bangalore line they are conspicuous by their absence;
6. Barring the N.-W. Railway, there are hardly strong racks for passengers' luggage.
7. The number of waiting rooms is extremely insufficient. And where they exist, they consist of an open tinshed, which give little protection from the scorching heat or the bitter cold of the north.
8. Refreshment rooms are rare on most of the lines;
9. Carriages are getting short;
10. Engines are getting sick;
11. Service is becoming irregular;
12. Return-tickets, week-end-tickets, 'Xmas-tickets are all discontinued;
13. And on top of all these, fares have recently been increased, and to-day they stand very high.

The third class passenger pays the most, but receives the scantiest accommodation, suffers the utmost privation, and is subjected to most unkind and inhuman treatment by insolent junior officers of the railways. Is this state of affairs creditable to the railway authorities? Does it not lead to dissatisfaction, even amongst the mass of the people? Don't they groan and grumble and curse the company?

The pet defence of the railways is 'war'! Who can say that the lot of third class passengers was any way better before the war?

Then why should the railway management put forward such flimsy excuses and perpetuate the privations of poor passengers?

The question that worries us most this moment is the threatened increase in third class fares. It may be contended that railway materials and wages have gone up considerably and so the railway fares must go up correspondingly! This is a very plausible argument. But, it is not at all convincing.

1. There is the practice even in Germany to run the railways not for the benefit of share-holders but for the convenience of passengers, and for the promotion of trade.

2. Then we have the instance of the French railways styling and serving their travellers not as passengers but as patrons!

3. Further, we find that railways in England are getting more and more democratized.

4. And now we have the report of the G. I. P. Railway making a record profit this year during the last twenty years!

How in the face of these facts, can Indian railways continue their autocracy, keep away the Indian element from their board, and then in these days of scarcity and suffering venture to put an additional burden on the over-pressed third class passenger? There is room for sterner supervision and trenchant retrenchment in stores, in supplies and in constructional works; for we have right in front of our nose the Parsic tunnel that cost over a crore of rupees and is under extensive repairs after four years of construction.

I appeal to all the Indian chambers, leagues and associations to protest against the threatened increase in the railway fares, and to press for the appointment of a representative committee of Britishers and Indians to enquire into the whole question of railway management in India, and particularly about the lot of the third class passengers, which, to say the least, is most pitiable and least creditable to Government. It is a reform that is imperative, essential and urgent, and I appeal to the great Gandhiji to move in the matter in time.

Yours faithfully,

Bombay, July 19th, 1920.

BARJORJI FRAMJI BHARUCHA."

"Leader" of Allahabad 7th May 1917.
"RAILWAY GRIEVANCES ON THE E. I. RAILWAY."
(To the EDITOR of the 'Leader'.)

"Sir,—I will be very much obliged to you and the public will be thankful to you if you will be kind enough to publish the following copy of a letter which I addressed to the General Traffic Manager of the E. I. Railway on the 7th instant. The gentleman has not yet been good enough even to acknowledge receipt of it!

Copy.

"Sir,—I wish to bring to your kind notice certain complaints of third class passengers which can seldom reach your ear primarily on account of the general illiteracy which prevails amongst people who travel by third class and secondarily on account of the general tendency of never complaining of wrong-suffered, to proper authorities, with a view to redress, however, disconsolate they may find themselves; or indignant they may be in their hearts.

2. It is admitted on all hands that, so far as passenger traffic on any Railway is concerned, it is the poor third class passengers who fill the coffers of Railway companies. Yet, in spite of this fact, it is these very poor creatures whose hardship knows no bounds. So far as any Railway administration is concerned, it is a very fortunate circumstance to their credit that Hindus attach so much religious importance to such places as Benares, Allahabad, Gaya, and several others throughout the length and breadth of India. Had it not been for this, much of the profits which all companies make, would have been nowhere. But unfortunately it is these very pilgrims, who pay the most, that suffer miseries untold on a railway journey.

3. Almost every Dekkani pilgrim who returns from the holy places on your railway has the same grievous tale to tell, exceptions there may be. But they must be very few and far between. The practice of harassing and making money out of the hardships of pilgrims is too general; so much so that if a railway commission

were appointed to enquire into the malpractices of the classes of railway servants mentioned above, voluminous evidence would be forthcoming in support of the general charge. I know a respectable gentleman who occupies a responsible post under the Government of Bombay, whose story of a pilgrimage to Benares and other places on your line in company with others, is simply heart-rending.

4. Recently I made a tour in Northern India in company with some of my friends. We visited Lucknow, Ajodhya, Benares, Allahabad and Agra. The whole of our journey was made partly by inter and partly by second class. So we could save ourselves the bother, worry and annoyance attendant upon a journey by third class. Still we had a bit of the bitter experience which an ordinary passenger has. Not only this. We know as a matter of fact, what, even a big European official who was to travel by first class and who met us at Agra Fort, had to do to secure a seat in the Punjab Mail for Bombay. But I think the E. I. R. has nothing to do with this station staff; and hence it is unnecessary to give any details. The grievance of molestation of, and exactions from, the pilgrim passengers, especially on the E. I. R., is one of a very long-standing. It is the bounden duty of every railway administration to see that their passengers are not molested or worsted. I must give you to perfectly understand that this is not my personal grievance: I simply hold a brief *sum moto* for the poor third class passengers, who are mostly unable to help themselves and always find themselves at a loss to know what to do.

I must also say in plain words that far be it from me to have even an idea of denouncing the several classes of railway servants wholesale. But from the nature of complaints often heard of, it appears that the number of black sheep amongst them seems to be very large. It is not very difficult for you to detect who they are. If you will only be kind enough to put up a few detectives of proved probity, I am sure you will never fail to find that the complaints are well-founded.

5. In conclusion I may only request you to bestow a sympathetic consideration to the above and take the blessings of thousands of your fellow-creatures as well as purify the service to which so many belong !

"I have also added a post script. 'It is needless to say that I can give you if necessary some of the ways in which money is squeezed out of pilgrims.' This is the long and short of the whole complaint posted a fortnight ago. As the G. T. M. has not even acknowledged a receipt of it, it is difficult to know how he has disposed of it. It is a public grievance which I think you will find it worthwhile to ventilate through the columns of your esteemed paper; and thus bring the matter to the direct notice of all the railway authorities concerned.

Yours faithfully,

V. G. JAVADEKER,

Amalner, Khandesh, April 24th, 1917.

Pleader."

In the Budget debate in the Legislative Assembly in March 1921, the Hon'ble Sir George Barnes deplored the corruption which exists on Indian Railways and said it was absence of help from the public that enabled the corruption to go on. True, but it is the law which prevents the public from giving evidence in such cases. The proper remedy lies in better pay for lower subordinates and association of the public in the administration of the railways, both in the administrative offices and at important stations. Will Government enforce this? The public will gladly co-operate.

Protection from heat of passengers and servants of Railway Companies in trains during the hot season.

The following resolution of the Government of India P. W. D. No. 614—23 R., dated 5th April 1870, appeared in the Supplement to the *Gazette of India* of 9th idem;—

Resolution.—The Governor General in Council desires that the attention of the officials of the several Railway Companies may be immediately invited to the urgent necessity for endeavouring by every measure in their power to render travelling during the hot season less trying and dangerous, especially to those who are not natives of India,

including their own servants, the guards, drivers and firemen, who are necessarily exposed to the worst heat.

2. It is believed that on the East Indian Railway, the addition of a double roof to the third class carriages has been found to reduce the temperature somewhat when the vehicles are not in motion, and that this improvement has either been, or is being, applied to the whole stock. The first and second class vehicles have all along had this advantage, and it is evident that something more is wanted to reduce the risks encountered by Europeans in travelling even in those carriages. One obvious improvement would be the fitting of *tatties* to the windows with appliances for watering them, and the Governor-General in Council trusts that it is only necessary for him thus to draw attention to the matter to ensure immediate steps being taken to provide first and second class carriages with this means of keeping down the extreme temperature that must otherwise prevail in Railway carriages in most parts of India during the hot months. There is no time to lose if this advantage is to be secured during the season just commencing.

3. The Governor-General in Council has no reason to suppose that the companies would desire to make any extra charge for this convenience, and it does not appear that the supply of the *tatties* and the arrangements for keeping them moist need be productive of much expense. But His Excellency in Council considers that no objection should be made to the demand by the Railway Companies of a reasonable extra payment from those who desire to avail themselves of the means of comfort thus placed within their power, rather than there should be any hesitation or delay on the part of the companies in acting on this suggestion.

4. But while His Excellency in Council thus advocates the interest of the public, he is not less mindful of the severe trial which the running and working of every train must prove to the working staff during the hot weather months, and especially to the drivers and firemen. How far the cabs of the Locomotives may be improved to ward off the effects of the sun from those who, in addition, have to bear the great heat inseparable from their position on the engine, without interfering with their efficiency, is deserving of the most careful investigation of the

departmental officials. The prudence of subjecting the drivers and firemen to the effect of a *tatty* may perhaps be questioned, but it would seem desirable at least to try its effect experimentally, as well as to endeavour to devise some other means by which the temperature may be kept down. For the guard, a *tatty* fitted to the brake-vans would be a simple expedient.

Troop Travel Rules in India.

As a result of the troop train case in June 1915, when a number of men belonging to Territorial drafts died from heat-stroke on a troop train journey from Karachi for the head-quarters of various divisions in Northern India, stringent Army Orders were issued for the stricter regulation of British troop movements by rail.

The various officers concerned with the arrangements are to be selected from those having previous Indian experience. A British officer is to accompany all parties of over 20 men.

During the hot weather large drafts will be despatched by special fast train, or, if in small parties, by mail train. Ice and all necessary comforts for the journey will be provided. Not more than four men will travel in each compartment, if ordinary third-class carriages are used. In the daytime blocks of ice will be placed in the centre of each carriage to cool the atmosphere.

No man will be allowed to purchase alcoholic liquors during the journey, or to leave his carriage at a station without his sun helmet on. A liberal supply of iced-drinking water in buckets will be provided at the chief stopping places, so that men can get a cool drink and replenish their water-bottles with a minimum amount of exposure; there will also be a supply of drinking water in the carriages. Ice and mineral water will be supplied free on the scale determined by the senior medical officer at the station of departure.

These and other arrangements that are to be observed will ensure for European troops travelling by rail in the hot weather the fullest possible measure of comfort and safety in passing through the sweltering plains of India.

CHAPTER II.—Railway Administration.

SECTION 1.—Direction and Control.

EACH of the Indian Railway Companies, having its Head Office in London, has been incorporated in England under the Companies' Acts in force there; whereas the railway companies, formed in India which so far own small branch railways only, come under the *Indian Companies' Act*.

All of them have their contracts with the Secretary of State for India; the contracts executed prior to the taking over of the Government by the Crown in 1859, were with the East India Company representing the Government of India.¹

The Directors of the Companies' Boards in London are mostly *ex-officials* of the Government of India, who after taking pensions from India, have joined the London Boards on the co-optative system. They are nominated by their friends who are already on the Board, and are practically self-elected, or mutually elected by one another.* The share-holders seldom elect them. Some of them are very capable with wide experience of India or

¹ Before India was taken under the direct control of the Crown, it had the system of triple Government, *viz.*:—In England it had the Court of Directors of the East India Company, and a Board of Control representing the British Parliament, both of them directing and disputing over and with the Government in India.

Parliamentary Control over the Indian Railways has been exercised through Select Committees, appointed from time to time by the Parliament:—

A Committee was appointed in 1857-58 to inquire into the causes of the delays that were alleged to have occurred in the construction of Indian Railways.

A Select Committee on Indian Finance* sat from 1871 to 1874.

In 1878-1879 a Select Committee was appointed to inquire into the expediency of constructing Public Works in India with money raised on loan.

In 1884, a Select Committee went into the matter of alleged necessity for more rapid extension of railway communication in India and the means by which this object was to be best accomplished.

Since 1884 no Parliamentary enquiry has been made into the Indian railways.

* Para. 5964-70 of evidence before the Select Committee of 1884.

Indian Railways, but cases are known where Directors of these companies continued to sit on the Boards till the age of 90 or 95 years. This is what one writer styled as the scandal of Directors retaining their seats until their mental and physical powers have diminished. "When a Director is so infirm from age that he has to be carried to his seat at a meeting by the office porter, he should retire and make room for some one more energetic and useful" was a wholesome advice.

The London Boards of Indian Railway Companies communicate direct with the Secretary of State for India; while their Agents in India communicate with the officers of the Government of India and act upon instructions received from their Home Boards. Whenever a difference of opinion arises between the Agents and the Government of India, the Agents refer the matter to their Home Board who either give instructions to the Agent, acquiescing in full or in part with the views of the Government of India, or refer the matter to the Secretary of State, who has often allowed the companies concessions even against the wishes and recommendations of the Government of India.

Lord Lawrence protested against direct action of the Secretary of State in relation to Indian Railways, in para. 27 of his minute dated 9th January 1869 * The Secretary to the Government of the United Provinces, P. W. D. Railway Branch, wrote to the Government of India as recently as 7th February 1917, in para. 5 of his No. 67¹/₃ R; "The present arrangements by which a Local Government has to reason with railway officers who can always evade responsibility by an appeal, real or imaginary, to their Board in London, are highly unsatisfactory, both to the Government and to the Railway." Apart from other serious objections which have been raised from time to time against the employment of companies for working the Railways, the objection to the domicile of their Boards in London has been generally admitted on all sides.

*Page 356 of Report of Select Committee of 1878.

Soon after the commencement of the guaranteed railways, the executive* control devolving on the Secretary of State for India, under the contracts of the companies, was exercised through the Consulting Engineers, who were aided by their Deputies and by the Government Examiners of Accounts. The former made periodical inspections of the lines and works and made their reports to Government. They also attended official meetings of the Agent and the Heads of Departments of each railway, which were held weekly or monthly. The minutes of these meetings contained the official record of the transactions, which required approval on the part of the Secretary of State for India. At the official meetings the Government Consulting Engineers transacted the business, giving sanction or not on behalf of Government according to certain prescribed rules, and both he and the Agent brought forward any propositions that either desired to make. The minutes of meetings, after confirmation, were forwarded to the Government of India, through the Local Governments under whom the Consulting Engineers were at first placed. One of these officers was appointed under each of the Local Governments of Bombay, Bengal, Madras, the North-Western Provinces, Oudh, and the Punjab, to whom certain powers were delegated, while the general supervision of all the lines was exercised by the Government of India. By this arrangement both the advantages of local knowledge and a harmony of action with the other branches of Government were effectually secured, while the supervision of the Government of India was sufficient to cause the same interpretation being placed in different Provinces on all the provisions of the identical contracts with the different companies.

With the exception of the East Indian Railway, the other railways were placed under the respective Local Governments, in whose territories the lines were located. In the case of the East Indian Railway, the Lower Division was under the Government of Bengal, while its Upper Division was under the Government of the North-Western Provinces. This system continued till 1865, when it was considered to be more convenient that the control of

*See page 13 of Imperial Gazetteer, Volume III Chapter VII.

each guaranteed company should rest in the hands of a single authority. The whole length of the East Indian Railway was accordingly placed under the Bengal Government.

The result of this change was that the Government of Bengal controlled railways in Bengal, North-Western Provinces, Punjab, Central Provinces, and the Native States under the Central India Agency.

The Government of the N.-W. Provinces (in which there was a greater mileage than in Madras, Bengal or any other Province) controlled none of the Guaranteed railways.

The Government of the Punjab controlled railways in Punjab and the North-Western Provinces.

The Administration of Oudh controlled railways in Oudh and North-Western Provinces.

The State Railways, which had commenced in 1867, were divided into suitable lengths and placed in charge of Superintending Engineers, under the immediate direction of the Chief Engineers in the P. W. D. of the Local Administrations, by whom all projects were submitted to the Government of India.

On the 13th May 1871, the Government of India wrote two Despatches to the Secretary of State for India, No. 45R dealing with the control of the Guaranteed and State Railways generally in Bengal and the N. W. P. and Oudh, and No. 46R dealing with the control of the S. P. and D. Railway. The Secretary of State in his No. 57R dated 15th August 1871, replied to the Government of India "that arrangements for the reorganisation of the Railway Department are left in your hands."*

Accordingly the Government of India had the entire control of the four Guaranteed Railways in the Upper India, viz:—

The East Indian Railway,
The Eastern-Bengal Railway,
The S. P. and Delhi Railway, and
The Oudh and Rohilkhand Railway,

* Government of India P. W. D. Nos. 1883 1890R dated 29th September 1871—Supplement to the *Gazette of India*, October 7th 1871.

transferred from the Local Governments to themselves from 10th October 1871. The Sindh Section was taken out from the Bombay Presidency and the whole of the S. P. & D. Railway was placed under the Consulting Engineer at Lahore. The Consulting Engineers at Calcutta, Lucknow and Lahore were placed directly under the Government of India, with extended powers* which were previously exercised by the Local Governments. The remaining railways were left under the Governments of Madras and Bombay Presidencies. The Consulting Engineers were required to submit to the Government of India, a weekly abstract of their proceedings in manuscript, with printed copies of minutes of official meetings, Inspection Reports, Revenue Account Notes and Reviews, and other lengthy notes or documents of importance.

The control of the Calcutta and S. E. State Railway was also placed under the Consulting Engineer, Calcutta; that of the Punjab Northern and the Indus Valley State Railways was continued under the Consulting Engineer, Lahore. The Rajputana State Railway and the Moradabad and Roorkee Railway Surveys were transferred from the N. W. P. to the Government of India.

One plan which suggested itself to the Government of India was the formation of a special Railway Branch of the P. W. D. in all Provinces—an arrangement which would have been most efficient and economical as the railways developed in the Provinces—but it was discarded at the time by the Government of India upon what now appear to be narrow considerations and want of foresight. The valuable assistance of the Local Governments was set aside on the following grounds:—

1. That the creation of a Railway Branch under the Local Governments would lead to a serious increase in the establishments and in the cost of the works.

2. That final powers of sanction could not be delegated to the Local Administrations except in such minor matters as are usually entrusted to the executive officers of the P. W. D.

* As modified by P. W. D. Reso. Nos. 49-54 A.R. dated 6th Feb. 1871.

3. That still less could any such powers be exercised in the design of locomotive or rolling-stock or of such machinery and iron-work as must be procured from England or of the Permanent-way.

4. That in the case of lines running through more than one Province, it would be necessary to divide the Districts into lengths which would suit the boundaries of each Province.*

In the same year, 1871, the Government of India appointed as their Consulting Engineer for State Railways, Mr. (now Sir) Guilford L. Molesworth, M. I. C. E., to whose marked abilities, experience and judgment the success of the State Railways was largely due. For many years, he was the sole technical adviser to the Government of India, and most of the details of railway construction, locomotives and rolling-stock were designed by him.

The volume of the growing business connected with the State Railways was too much for the Government of India Secretariat, and in April 1874 the appointment of a Director of State Railways was created. Three years later in 1877, the State Railways in the Upper India were divided into three systems, and three Directors, *viz* :—

The Western System for the Railways in the Punjab.

The Central System for the Railways in Rajputana, Central India, etc.

The North-Eastern System for Railways in Bengal.

Their head-quarters were at (1) Rawalpindi and Murree, (2) at Agra and Nainital, and (3) at Darjeeling. A fourth Director was at the same time appointed for State Railway Stores. These appointments were however not approved by the Secretary of State, and in September 1879 a single office of the Director-General of Railways was established, who was styled also the Deputy Secretary to the Government of India, Railway Branch of the P. W. D. With the assistance of the Consulting Engineers, he held charge of the Guaranteed as well as the State Railways,

* Paras. 13-16 of Government of India Despatch No. 45R of 13th May 1871.

especially in the control of Rates and Fares, general working, and compilation of Statistics and Administration Reports. This arrangement was not at all equal to the growing work of the State Railways, and in according sanction to the appointment, the Secretary of State expressed the hope that it would not be necessary to continue it for any considerable time. He looked forward to the early probability of the Government of India being able to free itself, as far as possible, from the direct executive functions in regard to the railway system, and that *eventually the construction, control and working of the State lines would be made over to Local Governments*. He thought that this should be the declared aim of the Supreme Government.* Italics are ours.

In 1897 the Office of the Director-General was merged into the Government of India Secretariat, and separate Directors were appointed for Railway Construction and for Railway Traffic. This system continued till 1905, when the Railway Board was instituted.

Upon the recommendation of the Special Commissioner for Indian Railways, Mr. Thomas Robertson, C.V.O., two important changes were made in the Administration of Indian Railways. One was the abolition of the Railway Branch of the Government of India Secretariat and the offices of the Directors of Railway Construction and Traffic, and the institution of the Railway Board in 1905, and the second change was the abolition of the offices of the Government Consulting Engineers for the companies' railways in 1907.†

The central idea was "that there should be a body of practical business men entrusted with full authority to manage the railways of India on commercial principles, and freed from all non-essential restrictions or needlessly inelastic rules."

The Railway Board was to deal with two distinct classes of

* Page 107 "Railway Policy in India" by H. Bell.

† Government of India P. W. D. Resolution No. 256G, dated 18th February 1905. See also Section 5 of Chapter VI herein.

duties, viz:—

(1) The deliberative duties including the preparation of the Railway Programme and the greater questions of railway policy and finance affecting all lines, the ultimate decision on such questions resting with the Government of India.

(2) The administrative duties including such matters as the construction of new lines by State Agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, and the settlement of disputes between railways.

The control of the railway system in India was entrusted to the Railway Board consisting of a Chairman and two Members. In the Chairman of the Board was vested the general control of all questions committed to the Railway Board, and the power to act on his own responsibility, subject to the confirmation of the Board. The Railway Board was also authorized to delegate to the Chairman or a Member, the power of settling questions which might arise on any tour of inspection, such decision being regarded subsequently as an act of Railway Board.

The Railway Board was placed under the Department of Commerce and Industry of the Government of India.

The strength and salaries of the Railway Board in 1912 were as under:—

The President Rs. 5,000 per month.

One member „ 4,750 „

Second „ „ 4,000 „ and pension of Rs. 7,000 per annum.

Secretary „ 2,000—Rs. 2,500 per month.

Four Assistant Secretaries on grade pay *plus* local allowance.

Office Establishment.

The Railway Board had also—

An Officer of the Finance Department to assist the Board on financial questions,

A senior Officer of the Railway Engineering Establishment, to whom the Board referred projects and schemes for scrutiny, technical opinion and advice.

The Board have direct charge of the three State-worked railways; their position in regard to these lines is somewhat analogous to that of a Board of Directors. As regards the Company-worked lines, the Railway Board exercise a controlling authority under the Secretary of State and the Government of India. The lines however are worked directly by the Companies' own Boards of Directors who, in turn, employ in local charge their own Agent.

As local representatives of the Railway Board for control under the Railways Act, there are seven Government Inspectors of Circles, among whom the whole railway system of India and Burma is divided. They are assisted by six junior Inspectors. Whether these Inspectors are fully employed is not apparent, as their duties are confined to matters under the Railway Act.

Prior to 1908, the Railway Board had to communicate with the Government of India on matters which it could not settle on its own authority. It addressed the Department of Commerce and Industry. According to the ordinary practice in the Departments of the Government of India, letters from outside bodies are first considered by various members of the Secretariat, and then submitted to the Member in charge of the Department, unless they relate to matters of mere routine, which may be disposed of by the Secretary or one of his subordinates. Notes written by members of the Secretariat are submitted to the Member together with the original communication. The question at issue is either decided by the Member in charge of the Department or laid before the Governor-General, who may submit it to the Executive Council. The decision is communicated to the outside body in a letter signed by a member of the Secretariat.

In view of the friction which had arisen between the Board and the Government of India and other circumstances, the Committee of Indian Railway Finance and Administration of 1908 remarked that the above procedure was not in all cases an appropriate one

for dealing with communications between the Railway Board and the Government of India, and made the following recommendations:—

(1) That as a general rule, the Government of India should interfere as little as possible with the action of the Board in technical matters and matters of detail, and that in matters of importance, when such interference is unavoidable, the opinions of the Board should be treated, both in substance and form, with special consideration.

(2) That whenever the Chairman thinks it necessary or desirable to bring a railway case directly before the Member in charge of railway business, he should have the right to do so, either by means of a memorandum to be communicated direct to the Member, or at a personal interview, whichever method he considers the more suitable.

(3) That the Chairman should have the right of access to the Governor-General at stated times and should attend the Council when required to do so by the Government of India.

(4) That no recommendation of the Railway Board should be over-ruled nor any blame imputed to it, without the matter having been previously brought to the notice of the Governor-General.

(5) That the Government of India should not, unless in very exceptional circumstances, interfere with the independent exercise by the Railway Board of the powers delegated to it under the orders of the Government of India.

(6) That the Board should have the right of direct communication with any Department of the Government of India, or with any Local Government.

According to the Committee, the Railway Board was not an authority outside the Government. "In view of the fact that practically the whole Railway system of India, with a capital value of something like 290 million sterling, is the property of the Government, that great financial, political, economic and military questions are involved in the administration of that system, and that the impor-

tant rights and obligations of the Government, in relation to the various agencies to which it has entrusted the working of a number of its lines, are governed by formal contracts, it is manifestly impossible," remarked the Committee, "that the ultimate decision of large questions can ever be delegated to any authority outside the Government of India, and by the scheme we propose the Railway Board will be to some extent in the position of a Local Government."

Under the arrangement of 1905, each Member of the Railway Board had an equal voice in its decisions, so that the dissentient Member in any case, even though he might have been the Chairman, must either defer to the opinion of the others or submit to be over-ruled by them. The desirability of conferring upon the Chairman the power to over-ride his colleagues, in cases where he was unable to accept their views, was recognized by the Government of India, and the Committee of 1908 were strongly of opinion "that the power and responsibility of the Board should be concentrated in one man," and they recommended "that the constitution of the Board should be a President, whose decisions on the questions with which the Board is empowered by the Government to deal, should be absolute, and two Members, whose position should be that of assistants and advisers of the President." "It is desirable," the Committee added, "that one of the two Members should have had wide experience in railway construction and the other in the management of the railway traffic, and possibly, as railway business increases in India, it may be found desirable to strengthen the Board by adding other members with special qualifications to deal with particular branches of the business. In the event of the two Members of the Board disagreeing with the decision of the President, they should be given the right to represent their views in writing to the Government of India."

As regards periodical tours of inspection of the railways and making suggestions or passing orders in connection with details of the working, etc., the Committee remarked that "whatever

advantage there might be in such inspections, must be more than counterbalanced by the disadvantage arising from the interruption of the administrative work of the Board during its absence from head-quarters." "It is not impossible," they added; that "the delays in the disposal of business of which some witnesses complained, are partly due to this practice. We are of opinion that the true function of the Board should be to carry on at head-quarters the general business connected with the administration of the Indian Railway System and that the inspection of individual railways should as a rule, be left to officers appointed by the Board for that duty. We do not question that it may sometimes, in special circumstances, be desirable for the Board to depute one of its members to investigate a particular question on the spot, but it should seldom, if ever, be necessary for the Board as a whole to leave its head-quarters, which should be with the Government of India."

"We would recommend that the Board in exercising its control over the railway system, should act on the principle of leaving a wide discretion to the Managers and Agents of the different railway systems, so far as regards all details of working. It was brought to our notice that, whereas before the institution of the Board, the Managers of each of the three State-worked lines had power to contract for the coal and sleepers which he required, the Board has withdrawn this power, and has itself entered into contracts for supplies of this description for use on the State lines. While it is, of course, necessary that the Board should exercise supervision we think," continued the Committee, "it is desirable that, except for very special reasons, it should not undertake to deal with matters of details such as we have mentioned. In the case specially of lines worked by companies, while it should be the business of the Board acting through its inspecting and audit officers, to see that the lines are maintained in a proper manner and that the provisions of the contracts are fully complied with, in all other respects it appears advisable that the responsibility for the efficient working of the lines should be

left in the hands of the companies and their Agents. From this point of view we have learned with much satisfaction that the Secretary of State has already sanctioned the abolition of the Consulting Engineers and the delegation to the Railway Companies of larger powers of independent action. The evidence given by several of the witnesses suggested that the system of exercising Government control over the companies through the Consulting Engineers frequently caused delay in the disposal of business and dissatisfaction in other respects."

The witnesses were interested parties, viz :—representatives of the companies. It is a pity that the Committee presided over by Sir J. L. Mackay made these sweeping recommendations, under which the companies' managements have become absolutely irresponsible to the needs and wishes of the public, and their work and expenditure are seldom, if ever, inspected or thoroughly examined by any independent authority. This state of Administration can never be satisfactory.

According to the Report of the Committee of 1908, the Railway Board is in the position of a Local Government; but under the Railway Board's Act IV of 1905 and notifications thereunder by the Governor-General in Council, the Railway Board has been invested with all the powers or functions of the Governor-General in Council, with respect to all railways, which powers or functions fall under certain Sections of the Indian Railways Act 1890. Certain conditions are however laid down, one among which is that the Railway Board shall in the exercise of any of the said powers or functions be subject to the control of the Governor-General in Council. The Board is placed under the Department of Commerce and Industry in the Government of India as stated before.

The constitution of the Railway Board has an official element only. It has no non-official member to represent the general public or the commercial and industrial interests.

This character of the Railway Board should be changed and non-official representatives of (1) the general public, and (2) the

Commercial and Industrial Bodies, should have an effective voice in the direction and management of the railways. The present Railway Board should be abolished and the work be retransferred to the Secretariats of the Central and Provincial Governments, to be directed by Sub-Committees from the Legislative Assembly and the Provincial Councils, respectively. We prefer this arrangement as more efficient.

The Railway Board is the most centralized and independent body of all the Government Departments in India. It is obvious that its charge is unwieldy to admit of the Board exercising that control over the administrative details which is necessary for the efficient and economical working of the railways, and for securing due comforts and conveniences to the travelling public and proper facilities and reasonable rates for the transport of merchandise and material for industrial works in India. To remedy the complaints which are constantly made by the public and which have not received due response from the railway authorities for the last 50 years or more, it is desirable to democratize the control of the Railways. The control both in the Central Government and in the Provinces should be placed in charge of Ministers, who should be assisted by Select Committees of the Legislative Assembly and of each of the Provincial Legislative Councils.

From the commencement of the railway operations in India, the control of both the companies and State Railways was vested with the Provincial Governments. In 1871 it was centralized in the Government of India. Even in the eighties there were more than eleven State railways under the Provincial Governments. These were subsequently taken over by the Central Government. This centralization created some difficulties when in the seventies it was held that the administration of railways was too onerous a task for the Indian Government to manage and the result was the employment of eight companies to work the State railways as agents of Government. Up to the year 1908 the Government of India had the Consulting Engineers' Department to help them in exercising the necessary control over the companies' admini-

trations, but the companies had that healthy control abolished and got themselves practically independent of Government control and supervision.

If the task was too onerous for the Government of India Secretariat, which had the same experts as now on the Railway Board, it must be equally unwieldy for the Board. Complaints* of various nature are constantly made by the public against the management of the Indian Railways, but the Railway Board has failed to have them remedied. It is, therefore, necessary to reform the present system and to transfer the administrative control of Railways to the Provincial Governments, a Select Committee of the Legislative Assembly with a Minister being established to perform general functions appertaining to railways of two or more Provinces, including the arrangements for through traffic, settlement of disputes between railways, matters requiring uniformity, compilation of annual Administration Reports, Statistics of Working, etc.

The Provincial division of the railways may be carried out in a convenient form. The best arrangement would be to begin with the State-worked railways and such of the company-worked lines as lie entirely within a single Province, those of the Company-worked railways which cover two or more Provinces, may be allowed to continue to be under the Central Government, until such time as the working of such railways can be acquired or resumed by Government, when the line should be provincialized.

By provincializing the railways, it is meant that the administrative control and financial responsibility of railways within the boundaries of the Provincial Governments be placed under the Local Government or Administration concerned. Take, for instance, the East Indian Railway, which runs from Kalka to Howrah and Jubbulpur, through five Provinces; viz.—the Punjab, the United Provinces, the Central Provinces, the Behar Province, and the Bengal. The portion lying in each Province should be under the Provincial Government concerned.

*See Section 11 of Chapter I.

An objection might be raised that such a division of a single railway might create difficulties in working, but such difficulties are more imaginary than real. The division of State lines might be carried out according to the Provincial boundaries, utilizing as far as possible, the existing Districts or Divisions of the Locomotive and Traffic Departments of the railway, which have separate charges administered by District Officers. If any of the Districts covers more than one Province, its boundaries might be altered to correspond with those of the Province. As all State Railways belong to the Government, there should be no difficulty in carrying out such division, or a division of the financial responsibility.

In Europe similar through lines, say from Brindisi to London, Christiania or Stockholm are owned by four or more States or Companies. In India itself, we have several independent railway administrations between Peshawar and Bombay or between Madras and Cawnpore, etc, etc., yet there is no difficulty in working or accounting for the through traffic. The existing arrangements in India, for the interchange of Rolling stock and the booking and accounting of through traffic, worked by different railway administrations, could be applied to inter-provincial traffic.

Or as an alternative, the railways might be divided in convenient groups and each of such groups might be placed under a Provincial Government, somewhat as the control of the Rajputana Malwa State Railway from Ahmedabad to Ferozepore, Delhi, Agra, Cawnpore, Khandwa, was under the Government of Bombay up to 1905, although these places are in the territories of several other Local authorities.

By placing the control of the railways under the Provincial Governments, we could secure such control and direction as are necessary for the efficient and economical administration of the railways. The Local Governments with their intimate knowledge of the needs of the people, trade and industries, can administer the railways better than the Central Board at Simla or Delhi, and they will be assisted by the representatives of the people under the newly reformed Councils.

In 1871 the Government of India itself thought of creating a Railway Branch in all Provinces, but discarded it on narrow considerations. In 1870 the Secretary of State expressed the hope that the Government of India would make over to Local Governments the executive functions in regard to railway systems. The Famine Commission* of 1880 made a recommendation for Provincial Financial and Executive responsibility in respect to famine relief railways. In 1884 General Richard Strachey, R. E., C. S. I., F. R. S.† who was a brilliant member of the Government of India, both in India and England, advocated the decentralization of the Indian railway administration; that the railways might be placed under the Provincial Governments both as regards the provision of funds and general control. Colonel Conway-Gordon R. E., late Director-General of India Railways, suggested‡ a popular representative system of railway administration for India. Sir James Caird, K. C. B. also favored Provincial administration of the Indian Railways.

In para. 277 of its Report, the Indian Industrial Commission of 1916-1918 drew attention to the absence of representation on the Railway Bodies, of the Provincial Departments of Commerce and Industries and of British and Indian Commercial Bodies. The Commission recommended the appointment of a Commercial Member of the Railway Board.

The subjects to be dealt with by the Provincial Governments should embrace;—

- (1) Working and management of existing lines,
- (2) Additions and alterations in the number and timings of passenger trains,
- (3) Comforts and conveniences and necessary accommodation for passengers and goods,—

*Paras. 12-15 of Report of the Indian Famine Commission 1880, Part II, Chapter V Section 10.

† Paras 32-37 and 90-91 of the Evidence before the Select Committee of 1884.

‡ Para. 4303 of *Ibid.*

- (4) Rates and Fares for passengers, goods and other traffic,
- (5) Further extensions of Railways,
- (6) Financial matters of the Railways.

In local matters the Provincial Governments might have freedom of action, but in matters relating to through traffic arrangements, they should act under the advice of the Central Board or the Central Government according as it may be decided to keep the Board or the Secretariat System under a Sub-committee of the Legislative Assembly.

The following advantages may be expected from the provincializing of the railways:—

- (1) The local requirements would receive due consideration;
- (2) The work which is unwieldy for a Central Government or single Body like the Railway Board, would be divided into seven or more convenient groups;
- (3) It would improve the efficiency of the railways and would tend to greater economy;
- (4) The Provincial Revenues would have a share of the surplus profits, and this would improve the Provincial finances;
- (5) In the case of new lines or extensions, the Local authorities would have a free hand and would create local syndicates to raise the necessary capital;
- (6) By general improvements which are to follow such administration, greater interest would arise among the people in their railways, which would result in a general advance in agriculture, industries, trade, commerce and general prosperity of the country.

SECTION 2.—Purchase of Stores.

One of the important branches of railway administration is for the purchase and supply of stores. Very large sums of money

are spent on this account. The orders of Government laid down that as far as possible stores should be obtained in India, while Indents on England should be submitted for such stores only as cannot be obtained locally. The officers in charge of railways prefer to have in their own hands the power of letting contracts and purchasing the stores, while the authorities in England have been insisting upon the material being obtained from that country. Controversies between the Indian and the English authorities have often arisen in this connection. The Stores Purchase Committee appointed by the Government of India in 1920 brought out this point prominently. They stated that a review of the Stores purchase policy of the Government of India from the year 1862 onwards led to two prominent conclusions:—

- (1) That the Government of India had not been successful in the efforts made by them from time to time, to procure relaxations of the Stores Rules, in respect of the encouragement of local industries and of Imported Stores.
- (2) That this failure had been contributed to largely by the influence of the Stores Department of, and the Consulting Engineers to, the India Office.

The Committee recommended the organisation of a new Indian Stores Department under a Director-General of Stores in India, with a Director of Stores in England, immediately subordinate to the former. This Department will arrange for the supply of Stores of all sorts for Government Departments, railways, and quasi-public bodies.

The Committee considered that the time had come when the Secretary of State should delegate to the Government of India full control over the details of the Stores Rules, and it should be accepted as a policy not only in theory but in practice, that all stores required for the public service shall be obtained in India whenever they are procurable in the local market, of suitable quality and reasonable price, preference being given to articles of Indian origin.

As regards the companies which work Government Railways, the Committee stated that the companies were free agents as regards purchase of stores. Under their existing contracts, they could not be compelled to conform to the policy approved by Government, nor to utilize the Indian Stores Department, though it was hoped that they would generally do so. The Committee suggested that when new working contracts are framed, opportunity should be taken to require the railway companies to conform to the Government of India system and procedure.

The purchasing of such large quantities of stores of various descriptions as are required for Indian Railways, requires a very close scrutiny and very stringent arrangements to secure economy. Large quantities of coal, timber logs and sleepers, stationery and general stores are annually purchased by the railway authorities in India, while iron-work and machinery are imported from abroad.

The Committee mentioned above recommended efficient arrangements for the inspection and passing of stores purchased on contracts. Until those arrangements are not brought into force, we consider it imperative that all supplies obtained through contractors should be inspected and passed by a Committee of at least three officers, *viz.*—One each from the Stores and consuming Departments and one from the Audit Department. In no case should this work be entrusted to a single individual.

This matter is of great importance and we trust the Railway Board and the London Boards of Railway Companies will enforce this procedure for the sake of economy in the cost of construction and working of the railways. The value of stores purchased by the thirteen principal railways during the year 1919-20 was as under:—

	Rs.
(a.) Value of stores imported direct ...	11,47,63,000
(b.) „ imported stores purchased in India ...	3,91,89,000

(c) Value of Stores of Indian manufacture of indigenous origin, excluding bricks, lime, mortar, timber, ballast, etc. ...			
	...	...	8,30,26,000
Total*	...	...	23,69,78,000

SECTION 3.—Working and management of Railways.

The working and management of open lines of Indian railways are divided into eight Departments as under:—

1. Management or Agency.
2. Audit and Accounts, including Cash and Pay.
3. Engineering.
4. Locomotive.
5. Carriage and Wagon.
6. Traffic.
7. Stores.
8. Medical.

The officer-in-charge of a railway is styled as Manager or Agent. Formerly the latter title was used on Companies lines and the former on the Government railways. Since 1912, the Railway Board have changed, the title of Manager on the three State-worked railway systems, and the officers-in-charge of the Main railway systems are styled as Agents. All other Departments are controlled and guided by that officer. His Assistants are styled as Deputy Agent, Secretary and Assistant Secretary.

The Audit and Accounts Department checks the accounts of receipts and expenditure incurred by the different Departments, compiles the half-yearly Accounts, sends to the Government Treasury the Cash received daily from the stations and other

sources, and makes disbursements and payments on bills submitted by the Departments. The designation of the officer-in-charge of this Department is Examiner of Accounts on the State systems and Auditor or Chief Auditor and Accountant on the Companies' railways. He has Deputies, Assistants, and a staff of Accountants under him. The Accounts Officers of State Railways belong to the Indian Finance Department.

The Officer-in-charge of the Engineering Department is styled as Chief Engineer or Engineer-in-Chief. His charge is divided in Districts or Divisions entrusted to Resident or Executive Engineers, assisted by Assistant Engineers, Sub-Engineers, Supervisors, Overseers, Sub-Overseers, Plate-layers or Permanent-Way Inspectors, and Sub-Inspectors. The Engineering Department has to maintain, repair and renew the road called permanent-way, bridges and buildings of all kinds and Departments.

The Superintendents in-charge of the Locomotive and the Carriage and Wagon Departments are Mechanical Engineers. On some railways the two Departments are combined in one. They have to look after the Engines and Carriages and Wagons (called rolling-stock) running on the line, and control the staff of Engine-Drivers and Carriage Examiners. The whole line is divided into Districts which are in charge of District Locomotive Superintendents, with Foremen in charge of Engine-changing stations and small workshops for light repairs. At the Headquarters they have extensive Workshops for heavy repairs, renewals, and construction of new Rolling stock and machinery. The Officer-in-charge of the Workshops is styled as Works Manager, who has under him a large number of Foremen, Assistant Foremen, Chargemen, Work-hunters, etc. They employ thousands of mechanics and artisans of all trades such as wood-workers, black-smiths, fitters, moulders, painters, brass and copper-smiths, tin-smiths, artists, electricians, etc., etc.

The working of railway workshops and the expenditure incurred in them require a very careful investigation by a strong committee to make sure that there is no extravagance or irregular

expenditure." The working is complicated and the expenditure in the workshops amounts to lakhs of rupees every month of each of the principal railways. Thousands of men are employed there, and the money is drawn from the Government Treasury.

The Traffic Department has the charge of railway stations and of the receiving, booking, carriage and delivery of both goods and passenger traffic. It is the revenue-earning Department of the railway. The financial success of the railway, comforts and conveniences of the travelling public, supply of wagons, and working of goods, luggage, parcels, etc., depend entirely upon the efficiency of this Department, which fixes also the rates and fares of all kinds of traffic and regulates them so as to meet the requirements of the public. It is the duty of the Officer in charge of Rates and Fares to see that a maximum profit is made to the railway with a minimum charge to the public, that the service rendered to the public is satisfactory.

The work of this Department also is divided in convenient lengths of districts, each of which is placed in charge of a District Traffic Superintendent, with an Assistant or an Inspector or both.

Military Transport.—Clause 20 of the original contracts of the old Guaranteed Companies provided that the privileges of conveyance and carriage of Mails and Troops were to be used and enjoyed in preference to, and priority over the public use of the railway lines for conveyance and carriage.

Military Transport by rail means the carriage of, and accommodation for men, horses, guns, wagons, stores, and war material of all kinds; officers of the Traffic and the Carriage and Wagon Departments are required to be well-acquainted with the details required for this Transport. Transport of troops and military stores is considered so important that the Government of India consider it necessary to employ a proportion of Royal Engineer Officers in the Management and Traffic Departments.

During the Franco-Prussian war of 1870, "the French Railways were scenes of disorder and obstruction, while those of Germany were acting with the unity and certainty of full rivers flowing towards the sea." Such efficiency could be attained by a proper organisation only, and a scheme for the war organisation of railways has been considered necessary from the early days of the Indian railways. The details have been fully worked out by the Government of India, which railway officials should study, so that they may be able to put them into practice in times of emergency.

In this work cooperation of the railway staff with the military authorities is necessary. The Traffic Department has to collect rolling-stock to make the trains, prepare the time-tables, work the Troop trains, and to generally assist the military in embarking and disembarking, *i.e.*, loading and unloading trains at railway stations or military sidings.

The Carriage and Wagon Department is required to build a proportion of wagons to suit the military requirements, and to maintain removable fittings for certain types of wagons for the carriage of horses, etc.

The Stores Department keeps Stores required for all Departments of the railway. The officer in charge of the Department is styled as Chief Store-keeper, or Controller of Stores, and has one or more Assistants. It is a post of trust and requires knowledge of the various kinds of Stores and their uses.

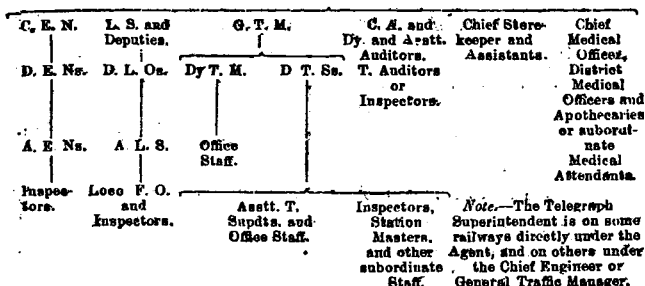
Medical Department provides medical aid to railway servants, and to passengers in cases of accidents.

In each of the first seven Departments, a large number of clerks is employed in various capacities. They prepare almost all the work for the officers, who usually sign the papers and occasionally write some of the important documents.

The accompanying chart shows approximately the organisation of most of the railways in India:—

RAILWAY BOARD OR COMPANY'S BOARD.

AGENT.



In 1913 the Traffic Department of the North-Western Railway was split into the two following heads, both working independently under the direct orders of the Agent :—

(1) *The Commercial Department*, which dealt with the securing, charging for, loading, despatching, unloading and delivering Goods Traffic. The head of this Department was the Chief Goods Manager, with two Deputies and Assistants at the Head office, and District Goods Managers on the line. Its business related to Goods Rates, Traffic canvassing, Goods Claims (Refunds and Outstandings), Establishment, Works, Stores, and General matters.

(2) *The Transportation Department*, which was entrusted with the running of trains and carriage of traffic of all kinds, including the Coaching Tariff work and safe-custody of cash earnings from Goods as well as Coaching Traffic. The head of this Branch was the Chief Superintendent of Transportation, with two Deputies and Assistants at the Head Office, and District Transportation Superintendents, Assistants and Inspectors on the line. The work at the head office was allotted as follows :—

(a) *Under the Deputy T. S. "T."*

1 A. T. S. for Stock movement, Train-haulage, joint-station agreements and accounts, and General matters—

- 1 D. T. S. for Trains, Time-tables, Military concentration, Accidents, General Rules, Telegraphs, and Stores.

With a staff of six Telegraph Inspectors and four District Inspectors.

(b) Under the Deputy T. S. "W."

- 1 D. T. S. for Works, Establishment, Schools, and Inspection.
- 1 D. T. S. and 1 A. T. S. for Passenger management, Luggage and Parcels Booking, Refreshments and public convenience, complaints (Coaching), Coaching Claims and Refunds.

We have in several places referred to the Report of Mr. Thomas Robertson, C. V. O., who was sent out by the Secretary of State for India, as a Special Commissioner for Indian Railways in 1901-1903. Although we do not approve of his recommendations with regard to the administrative control of the railways, we have no hesitation in stating that his recommendations with regard to the working of traffic are generally valuable. Many of them have not yet been carried out. We give here a list of the subjects dealt with by him and quote the Nos. of his paragraphs in each case:—

Passenger traffic.

Acceleration of speed of passenger trains (163-69).

Need for running more Passenger trains (Para. 170).

Discontinuance of Mixed trains on the main routes and in other places where the traffic is heavy (171).

Need for improvement in 3rd class Carriages and for increase in 3rd class accommodation on fast trains, and for the provision of 3rd class carriages to run through to the final destination of through trains (172).

Unsatisfactory condition of carriages used on Branch line trains (172).

Overcrowding of 3rd class carriages and conveying of pilgrims in goods wagons (173).

Ill-treatment of 3rd class passengers (174).

Want of Hindu and Mohammedan Refreshment Rooms and provision of Dining cars (175-76).

Need for more Booking offices (177).

Communication between passengers and guards (178).

Lighting of trains (179).

Loading of Passenger trains (165 and 180).

Goods Traffic.

Losses arising from slow working of goods traffic (181-88).

Marshalling arrangements (189).

Loading of trains and wagons (190).

Rates and Fares.

Comparison of passenger fares and goods rates in India with those in England and America and need for reductions in India (191-98).

Villa tickets, Week-end, Excursion, and Tourist Tickets (199-200).

Coolie traffic, season tickets, and workmens' tickets (201-202).

Traders' Tickets (203).

Classification of goods and through Rates (204).

Invoicing and way-billing of traffic (205).

Goods and Parcels Collection and Delivery (206).

Position of Passenger Stations and Goods Depôts (207).

Development of local industries (208).

Equalisation of goods traffic (209).

Risk Notes in use in India and in England (210).

Claims. Complaints regarding—(211).

Coal traffic (212-18).

Rolling Stock.

Requisite types of Engines and their working (221-226).

Bogie carriages (227).

Lavatory accommodation in 3rd class carriages (228).

Passenger classes (229).

Economic types of Goods Vehicles (230-46).

Better utilisation of rolling stock (247-48).

Axle-loads (249-50).

High percentage of engines and Vehicles undergoing repairs in India (251).

Automatic Coupling (252).

Widening of vehicles (253 and 315-16).

Train Working.

Absolute Block (254-63).

Interlocking of Points and Signals (264-69).

Automatic brakes (270-71).

Miscellaneous.

Permanent-Way (272).

Dust prevention on railways (273).

Ballasting arrangements (274).

Gradients (275).

Hours of labour (276).

Training of Signalmen (277).

Light and color-testing of Railway employes (278).

Out-door Supervision. Need of thoroughly qualified energetic Inspectors to see most minute details of working (279).

General.

Linking up of detached and isolated lines (282-87).

Linking up of the metre-gauge railways (288-91).

Giving metre-gauge lines direct access to ports (292).

Terminal arrangements at Calcutta (293-95).

Clearing House for Indian Railways (297-305).

Station Returns and Railway statistics (306).

Traffic Conference (309).

Loco. and Carriage Superintendents' Conference (310).

Indents for English Stores (311-12).

Broad *versus* metre-gauge, compared with 4'-8½" gauge of Europe and America (313-332).

SECTION 4.—Salaries of State Railway officials.

Management Department.—The original scale for the Superior Revenue Establishment (which included all Departments except Engineering), adopted in 1872, was an incremental one, on rates of pay varying from Rs. 250 to Rs. 1,200 per month.

In 1889 the scale was modified and the following rates of monthly salary were introduced for:—

	Managers.	Dy. Managers.
	Rs.	Rs.
North Western Railway ...	2,500	1,100—1,350
Eastern Bengal ...	1,800	1,100
Oudh and Rohilkhand ...	1,600	1,000

In 1902 the maximum for each of the three Managers was raised to Rs. 2,500, and in 1908, the rates were revised as under:—

Managers, N. W. and E. B. Rys., Rs. 3,000 each,

Manager, O. & R. Ry., 2,500.

Deputy Managers.....Rs. 1,500—1,750.

Engineer Establishment.—The conditions of service of the Engineer Establishment of State Railways are similar in all respects to those of the Public Works Establishment. They are the only pensionable staff on the State railways and divided as under:—

(a) The Imperial Engineer Establishment recruited from England, and

(b) The Provincial Engineer Establishment recruited from the Roorki Engineering College and Upper Subordinate Establishment.

The Provincial Service was introduced in 1886-87. Save in the Chief Engineer Class, the pay of the Provincial Service was $\frac{2}{3}$ ds of the pay of the Imperial Service. The rates sanctioned

by the Secretary of State, so late as 1908 and 1912 respectively were as under:—

		Imperial.	Provincial.
Assistant Engineers ...		380—40—750	250—25—475
Executive „ ...		800—50—1,250	535—35—850
Superintending „ ...		1,500—2,000	1,200—1,600
Chief Engineers, 2nd class		2,500	2,500
„ 1st class		2,750	2,750

Superior Revenue Establishment.—In 1889 the original incremental scale of 1872 was replaced by the following scale of classes and grades on fixed salaries:—

Class.	Grade.	Consolidated Salary, Civil and Military.	Scale for Military officers not drawing consolidated Salaries.		Office.
			Staff salary.	Maximum to be drawn.	
		Rs.	Rs.	Rs.	
I	{ 1	1,600	800	1,800	Heads of Locomotive and Traffic Departments and Deputy Managers.
	{ 2	1,350	750	1,575	
	{ 3	1,100	700	1,350	
II	{ 1	950	600	1,250	District Locomotive and Traffic Officers, and Store-keepers.
	{ 2	800	500	900	
	{ 3	700	450	800	
	{ 4	600	350	650	
III	{ 1	500	300	550	Assistant Locomotive and Traffic Officers, and Store-keepers.
	{ 2	400	250	500	
	{ 3	350	200	450	
	{ 4	250	...	...

From December 1908, a revised scale was sanctioned, under which the pay of the Heads of Traffic and Locomotive Departments was raised to Rs. 2,000 and that of their Deputies to Rs. 1,500 per mensem. The Royal Commission on Public Services 1912 recommended that the maximum salary of Traffic Superin-

tendents only be raised to Rs. 2,250. From April 1911 the scale of pay for the District and Assistant Superintendents was fixed as follows:—

<i>District Superintendents.</i>				<i>Assistant Superintendents.</i>			
Rs.				Rs.			
Class II grade 1	...	1,100		Class III grade 1	...	550	
" " 2	...	1,000		" " 2	...	450	
" " 3	...	900		" " 3	...	400	
" " 4	...	800		" " 4	...	300	
" " 5	...	700		" " 5	...	200—250	

Exchange compensation allowance was absorbed. In the case of Assistant Locomotive Superintendents, the starting pay was fixed at Rs. 400 per mensem in 1912, owing to their longer training and older age.

The maximum pay of a Chief Store-keeper was Rs. 950 till 1904, when the pay of the Chief Store-keeper, N.-W. Ry., was raised to Rs. 1,100. The revised scale for Store-keepers and Assistants from April 1911 was as under:—

<i>Store-keepers.</i>				<i>Assistant Store-keepers.</i>			
Rs.				Rs.			
Class II grade 1	...	950		Class III grade 1	...	500	
" " 2	...	800		" " 2	...	400	
" " 3	...	700		" " 3	...	350	
" " 4	...	600		" " 4	...	200—250	

The salaries of the whole-time Medical Officers on State Railways were Rs. 600—800 per month.

In February 1921, the Government of India sanctioned the following revised rates of pay for the Permanent Superior Revenue Establishment, with effect from 30th August 1919:—

Rs.	
Loco. Superintendent, N. W. Ry.	... 2,500 fixed.
" " E. B. and O. & R. Rys.	2,300—100—2,500
C. & W. Superintendent, N. W. Ry.	2,000—100—2,500
Dy. Loco. Superintendents	... 1,750—50—2,000

Dy. C. & W. Supdt., N. W. Ry. ...	1,750 fixed.
Traffic Manager, N. W. Ry. ...	2,500 fixed.
„ E. B. and O. & R. Rys. ...	2,300—100—2,500
Dy. Traffic Managers ...	1,750—50—2,000
Controller of Stores, N. W. Ry. ...	1,750—50—2,000
„ E. B. Ry. ...	1,650—50—1,900
„ O. & R. Ry. ...	1,500—50—1,750
Senior Dy. Agts., N. W. & E. B. Rys.	1,750—100—2,100
Junior „ N. W. and O. & R. Rys.	1,750—50—1,900

The above rates will be drawn by incumbents irrespective of nationality or source of recruitment. No overseas or technical pay will be admissible in addition. The increases are beyond the recommendations of the Public Services Commission.

Subordinate Establishment.—The Upper Subordinates of the Engineer Establishment of State Railways are recruited from the Engineering Colleges at Roorki and Sibpur (Calcutta). The Upper Subordinate classes of those Colleges are guaranteed three appointments annually to the Upper Subordinate Establishment of State Railways. The pay of this establishment is as follows:—

	Rs.
Sub-Engineer 1st grade ...	400
„ 2nd „ ...	300
„ 3rd „ ...	250
Supervisor 1st grade ...	200
„ 2nd „ ...	150
Overseer 1st „ ...	100
„ 2nd „ ...	80
„ 3rd „ ...	60

A Sub-Engineer, 1st grade may, after 5 year's meritorious service in the grade, receive an increment of Rs. 50 per mensem, and a second increment of Rs. 50 after another 5 years.

The Subordinate Revenue Establishment of State Railways

was originally classified as follows:—

				Minimum.	Annual increment	Maximum.
				Rs.	Rs.	Rs.
Class	A	...	...	15	2	25
"	B	...	...	30	3	45
"	C	...	...	50	4	70
"	D	...	...	75	5	100
"	E	...	...	110	10	160
"	F	...	...	170	10	220
"	G	...	...	240	12	300
"	H	...	...	325	15	400

From 9th August 1882, classes A to D of the above were abolished and Managers were empowered to entertain employees on any salary within the limits of a schedule.* For subordinate appointments, however, not falling under that schedule, the incremental scales of pay, classes E to H, were retained. From 10th September 1888, the Government of India decided that for all future appointments, the scales of pay denoted as classes E to H were abolished, and a system of a fixed number of posts with fixed salaries was introduced on all State Railways, whereby the pay of all Revenue subordinates was to be regulated, according to their qualifications and the market value of the work, which they were called upon to perform, and increase of pay would depend on the existence of a vacancy in the higher posts.

Up to September 1881, the Service on State Railways was pensionable. With the introduction of the Provident Institution on State Railways on 1st January 1880, appointments made after September 1881 were classed as non-pensionable, in all grades and classes of State Railway Revenue Establishment, Superior as well as Subordinate. Up to 31st December 1885, pensionable men, who had been engaged prior to September 1881, were allowed to subscribe to the Provident Institution, but on a representation

* See paragraph 4 (b) 1 of Chapter VIII Volume IV, P. W. D. Code.

made by the Non-pensionables, the former were, from 1st January 1886, excluded from the benefits of that Institution, and their subscriptions already received were refunded.

Hours of Work.—The hours of work, on Indian railways, vary under 4 different heads as under:—

(1) *Work in District or General offices*.—It is generally continuous on the desk and six hours a day excluding Sundays and holidays has been generally observed or laid down, though the men at times are called upon to work extra hours without extra allowance.

(2) *Work at the Stations*.—This varies according to the number of trains running on different parts of the country. The working hours vary from 8 to 12 hours per day.

(3) *Running staff working trains*.—Their hours depend upon their trips, but their fixed pay covers 48 hours per week. For any extra work actually performed, they are paid extra allowance on mileage or the trip system.

(4) *Workmen and Mechanics* employed in workshops and out on the line, who work mostly with their hands. In their case 48 hours per week is generally recognised. For any extra work, they are allowed overtime allowance on the basis of 8 hours per day.

Men coming under heads 1 to 3 are generally on monthly rates of pay, while those in head (4) are mostly on daily-pay.

Compensation for Accidents.—The question of instituting a system of workmen's compensation for accidents in the performance of their duties will, it is hoped, soon be brought before the Indian Legislature. At present the law on the subject is very unsatisfactory, as it leaves the men to the tender mercies of the employers. In other countries the law provides for compensation for injuries or loss of life but in India there is no such law.

Section 5.—Strength of Railway Servants.

According to the Railway Board's Classified List and Distri-

bution Return for the half-year ending 30th June 1912, the Superior Establishment of Indian railways was as follows :—

Railways.	Europeans and Anglo-Indians.		Indians.		Total.	
	No.	Monthly pay.	No.	Monthly pay.	No.	Monthly pay.
		Rs.		Rs.		Rs.
Worked by State ...	455	3,53,708	45	26,425	500	3,80,133
Principal Companies ...	1,088	8,58,803	28	12,292	1,116	8,71,095
Barsi Light Ry. Minor Companies ...	4	not given	...	...	4	not given
	19	13,207	3	1,250	22	14,457
Indian States...	22	20,985	11	3,180	43	24,165
Total ...	1,598	12,46,703	87	43,147	1,685	12,89,850

The total number of Upper Subordinates on the State-worked railways in 1912 was 589 on a monthly pay of Rs. 1,76,282, of whom 425 on Rs. 1,35,302 were Europeans or Anglo-Indians, and 164 on Rs. 40,980 were Indians. The particulars of the subordinates employed on other railways were not given in that publication. The information was summarised with care but it is possible some mistakes might have occurred in classifying some of the officers as Europeans or Anglo-Indians. They would not however, make much difference.

The total number of servants of all races employed on the Indian Railways at the end of each year was as follows :—

	European.	East Indian or Anglo- Indian.	Indian.	Total.
1882	3,796	3,922	178,018	185,736
1892	4,507	5,807	248,446	258,760
1902	5,875	8,669	378,373	392,517
1912	7,850	10,066	571,506	589,422
1913-14	7,986	10,437	614,882	633,305
1914-15	7,641	10,349	582,492	600,483
1915-16	7,278	10,412	608,895	626,580
1916-17	6,907	10,425	619,202	636,534
1917-18	6,796	10,233	636,936	653,964
1918-19	6,706	10,456	668,803	685,965
1919-20	6,941	10,865	694,884	711,690

These figures would have been more interesting if the total amount of salaries under each head were also given by Government. As it is, the figures are misleading. They show that over 97 per cent. of the railway servants are Indians, but the fact is that Indians are employed on the lowest posts, while best paid posts are held by the others, who take an undue proportion of the money.

The Japanese Railways give the details of their officials and employees in a very comprehensive form for each year. The following is their record for the year 1917-18 :—

	No.	Monthly compensation yen.	Average per Capit yen.
Superior grades—			
<i>Shinnin</i> and <i>Chokunin</i> Rank, (Minister and Heads of Departments)	19	6,292	331.15
<i>Sonin</i> rank	441	69,913	158.83
Subordinate grades—			
Clerks of <i>kannin</i> rank	4,809	215,348	44.78
Assistant Engineers of <i>kannin</i> rank	2,318	121,398	52.62
Employees of <i>Koin</i> Class	34,978	743,152	21.62
Foremen	1,051	42,395	40.34
Employees of <i>Yonin</i> Class	82,272	1478,623	17.97
Total	125,888	2,677,181	21.27

The Indian Railway Board also should give the information yearly in similar details for the three races.

SECTION 6.—Recommendations of the Public Services Commission.—(*Written in 1917.*)

Unlike the Indian Civil and certain other services, the State Railway Revenue Establishment has no restrictions against pure Indians. The Secretary of State and the Government of India have laid down from as early a time as the year 1870 that all appointments on the State Railways are open to Indians and every encouragement should be given and every effort made to give the largest possible employment to Indians on the Railways. These declarations have fully maintained the spirit of the Parliamentary Acts of 1833 and 1853 and of the Royal Proclamation of 1858. But under the artificial barriers systematically laid by the monopolists, Indians, who in population number 99·91 per cent., and in English literacy 82 per cent. of the whole, at present hold only 10 and 6 per cent of the appointments in the superior grades of the State Railways, carrying salaries of Rs. 200 and above, and of Rs. 500 and above respectively; while, Europeans and Anglo-Indians who form only 0·09 per cent. of the whole population and 18 per cent. of those literate in English, hold 90 and 94 per cent. of those appointments respectively.

The recommendations of the Royal Commission in regard to the State Railway Revenue Establishment fully upheld the former orders and rulings of Government and insured that, until such time as suitable arrangements are made for the recruitment of the whole Railway service entirely in India, 50 per cent. of the appointments made in India should be given to pure Indians including Burmans. It is our business to see that effect is given to this recommendation and that the artificial barriers which have so long stood in the way of Indians are effectually removed.

The recommendations of the Public Services Commission with regard to the various branches of the Indian Railway Services are contained in the different chapters of the Report of the majority of the Commissioners and in Annexures VI, XVIII, and XIX. With them should be read the remarks and recommendations at

pages 373—86 and 394—488 by Sir M. B. Chaubal, K.C.I.E., C. S. I., and Justice Sir Abdur Rahim. Annexure VI refers to the Audit and Accounts, which comes under the Indian Finance Department; Annexure XVIII refers to the Engineering Establishment of the P. W. Department, including the Railway Engineering; and Annexure XIX refers to the State Railway Revenue Establishment including the Management, the Traffic, the Locomotive, the Carriage and Wagon, and the Stores Departments. The first-two departments coming in Annexures VI and XVIII embrace services which deal with railways as well as other branches of Government Administration, while the five departments dealt with in Annexure XIX are entirely for Railway Administration.

In the introductory paragraph to Annexure XIX, the Commissioners remarked that State railways worked by Companies are administered by their Boards of Directors and did not come within the scope of the Commissioners' enquiry. The Commissioners were no doubt the best judges of the scope of their enquiry, but they themselves noted that the administration of the Companies is "subject to the Controlling Authority of Government." The State railways, which these Companies work, are the property of the Government and all appointments made by the Companies are subject to confirmation by the Government. Under these circumstances whether the appointments of staff for the State Railways worked by the Companies were within the scope of the Commissioners' enquiry or not, those appointments should certainly be made and governed by the same principles and general rules as may for the time being be in force on State railways administered by the direct agency of Government, especially with regard to the unrestricted employment of Asiatic-Indians. The Government should, we submit, insist upon the companies following the Government principles, before according their confirmation to any appointment which may be made by the companies in contravention of the Government rulings. This is absolutely necessary as long as these companies continue under their present contracts.

In reply to the Hon'ble Sir Dinshaw Eduljee Wacha's question in the Viceroy's Council at Delhi on 28th February 1917, the Hon'ble Sir Robert Gillan referred to a recent advertisement by the G. I. P. Company, inviting applications from Indian gentlemen for appointments in the superior grades of their Traffic department, and to the proposals which the East Indian Railway Company had submitted to the Railway Board for the training of Indians to qualify them for appointment as officers in the Locomotive Department. These were given as instances of the attitude of the companies to the question, and the Government felt that the companies would co-operate in giving effect to the Government policy to increase the number of Indians in the higher branches of the railway service. This showed that the Government of India realized the importance of bringing the companies round to their own policy in this matter. But the matter should not be left to the choice of the companies. It should be definitely laid down that the Government principles for employing Indians should equally apply to all State railways, whether worked by Government or through the agency of Companies. This question is of great magnitude and of vital importance to Indians, as there are on the eleven company-worked railways about 1,116 appointments in the superior grades, carrying a total monthly pay of about Rs. 8,71,095, according to the Classified List and Distribution Return of Railway Establishment for the half-year ending 30th June 1912. The individual pay of these appointments varied from Rs. 150 to Rs. 3,500 per month, while there may be an equal or larger number of appointments in the subordinate grades, the pay of which varied on the Government-worked State Railways from Rs. 60 to Rs. 700 per month.

The recommendations of the Commission are summarised as follows in paragraph 17, Annexure XIX, page 344 of Volume I of the Report:—

“(i) The European element in the Traffic Department to the extent needed, should be provided by Royal Engineer officers, and all other officers should be recruited in India. Officers should be appointed in

England only if no suitable candidate is forth-coming in India.

(ii) Selected subordinates in the Locomotive and Carriage and Wagon Departments should be given as comprehensive a training as possible, with a view to their promotion to the superior staff.

(iii) Statutory natives of India should be admitted as apprentice pupils to the shops and Running Sheds of the State Railways.

(iv) Officers should be appointed in England to the Locomotive and Carriage and Wagon Departments, only if no suitable candidate is forth-coming in India.

(v) Indians should be appointed in at least 50 per cent. of the vacancies in the Superior Revenue Establishments for which recruitment is made in India.

(vi) Appointments to the Traffic department in India should normally be made by direct recruitment from among candidates with a prescribed educational qualification.

(vii) An officer of the State railways should be appointed to serve on the India Office Selection Committee for the Traffic department.

(viii) In making appointments in England to the Traffic department, preference should be given to candidates with experience of Railway traffic work.

(ix) In making appointments in England to the Locomotive and Carriage and Wagon Departments, preference should be given to candidates who have passed the A. M. Inst. C. E. Examination or an equivalent test. Appointments should be made with the advice of a selection committee.

(x) A minimum educational qualification should be prescribed for admission to the stores department, preference being given to candidates with a knowledge of mechanics.

(xi) Appointments in India should be made with the advice of a selection committee.

(xii) The pay of traffic superintendents should be increased.

(xiii) New entrants to the Stores department should not be entitled to exchange compensation allowance.

(xiv) Officers appointed in India to the Locomotive and Carriage and Wagon departments should enter in a lower grade than officers appointed in England.

(xv) Officers appointed in India should be subject to the Indian service leave rules.

(xvi) The rate of interest payable on deposits and bonuses in the Railway provident fund should be increased to 4 per cent. and the Government bonus should be fixed at 100 per cent. on officers' contributions."

These recommendations are in regard to the five departments, viz.—Management, Traffic, Locomotive, Carriage & Wagon, and Stores. The Locomotive and the Carriage and Wagon Departments are technical, requiring a good knowledge of Mechanical and Electrical Engineering; while the Management, Traffic and Stores Departments need a good general education before the training in practical work of the Departments is given.

The former rulings and orders are contained in Government of India P. W. D. Nos. 1450—55 E. R., dated 27th November 1878 and Nos. 128—44 R. E., dated 10th November 1879. The former stated that—

"The Secretary of State has frequently impressed on the Government of India the expediency of employing the Natives of India in posts of importance to a larger extent than it has hitherto been found practicable to do and the Government of India has had the subject under serious consideration."

In the latter Resolution the Government of India laid down that—

"It should be clearly understood that all posts in the Revenue Establishment of State Railways are open to Natives of India, and as men in every respect qualified for the superior grades are found, the Government of India will be glad to receive from Local Administrations recommendations for their employment in suitable positions."

(The italics are ours. From these orders it is evident that all appointments on State Railways are open to Indians. The proportion of "at least fifty per cent." given in clause V of the recommendations of the Commission does in no way restrict the employment of Indians. It is intended to ensure that fifty per cent. of the new appointments made in India are at once given to "Indians and Burmans of unmixed Asiatic descent" (see paragraph 33, page 23 of the Report); as the Commissioners expressly stated in paragraph 35 page 26 of the Report that they have fixed the minimum proportion as a temporary palliative

where Indians are clearly not being employed in sufficient numbers and the Commissioners wished "nothing which will prevent qualified Indians where available from being appointed in any number on their merits."

Management Branch.

The Commissioners remarked that "no question arises as to the management branch of the Railway Department, as this contains only a few administrative posts which are filled by the most capable officers already in the Department" (paragraph 31 page 22 of the Report). It is true that the Agents, Deputy Agents and Assistant Agents are usually selected from the officers already in the lower Departments of the State Railway Revenue Establishment. But the point to be considered by Government and always to be borne in mind is that a majority of the officers of the management Branch on each Railway should compose of Indians, to look after the needs and interests of Indian passengers, Indian merchants and Indian Railway Servants, which an Indian alone properly understands and can adequately appreciate, as the majority of Europeans and Anglo-Indians know little or nothing about the social life and customs of the people, or of the business ways of Indian trade. This is very important and Government do recognise it by having Indians in the subordinate grades of this Branch, but this is not enough and Government should certainly appoint Indians to the more responsible posts in the superior grades of this Branch.

Traffic Department.

In the Traffic Department all appointments were formerly made entirely in India, but from the year 1907 the normal practice was to recruit for about $\frac{2}{3}$ ths of the vacancies in England and for about $\frac{1}{3}$ ths in India. The Commissioners recognised that owing to considerations of policy, it was necessary to maintain a nucleus of officers imported from Europe, which they thought could be supplied by appointment in India of Royal Engineer Officers. The rest of the staff, the Commissioners recommended, should gradually be recruited in India from among statutory

natives of India, and the Commissioners advised that this object be kept constantly in view and that in no case should application be made for the appointment of an Officer in England if a suitably qualified candidate is available in India.

While we have no objection to the employment of Royal Engineer Officers on State Railways, we hold that the mention of "considerations of policy" betrays a want of confidence in Asiatic Indians which, the Commissioners were led to accept in the pre-war days. Now all those suspicions have been falsified by the blood which such Indians have fully shed on the battle-fields of France and elsewhere, for the sake of the British Empire, and the "altered angle of vision" does not require such considerations of policy in making appointments to the Traffic Department of State Railways.

The order issued by the Government of India in 1879 for the employment of Indians in the Superior grades of the Traffic Department had only this effect that, after a period of 33 years from the date of that order, there were in 1912 only 12 Indians out of the 99 posts on the three Government-worked State Railways, and there was not even one Indian in appointments of Rs. 1,100—2,000 per month. On the Company-work State Railways, the proportion of Indians was still lower; only 5 out of the 238 posts were held by Indians, a miserably poor show 60 years after the opening of the railway in India.

Unless Indians themselves assert their rights and put forward their claims in a persistent manner, they are not likely to gain much by the recommendations of the Royal Commission. These recommendations, as a matter of fact, do not go beyond what was ruled in their favour in 1878. As the orders of 1878—1879 have remained unfulfilled so long, the advocates of Indian interests should see that in future the orders are properly carried out by the appointment of suitable Indians on the selection committees recommended by the Royal Commission.

*Procedure to be followed in selecting recruits for the Traffic Department (para. 8 page 339).—*At present the appointments in

India are made in four different ways, *viz* :—

- (a) by direct appointment of outside candidates,
- (b) by appointment of Royal Engineer officers,
- (c) by promotion of Subordinates,
- (d) by transfer from Company-worked railways.

The Commissioners recommended "that, for the future, vacancies should normally be filled by direct recruitment. Promotions from the subordinate staff should only be made exceptionally, and officers should not be transferred from other Indian railways except to fill higher appointments for which no suitably qualified departmental officer is available."

These recommendations are quite fair and should be adopted. The transfer of Traffic officers from the Company-worked lines will seldom, if ever, be necessary, as the officers on the Government list will generally be quite as efficient, if not better than those on the lists of the Companies.

For direct recruits in India, the Commissioners prescribed the following as a minimum educational qualification :—

- (a) Candidates should either possess the degree of an Indian University, or
- (b) have passed an examination of a corresponding standard prescribed by Government for the European Schools.
- (c) Passed students from the Provincial service class of the Burkes Engineering College should also be eligible for appointment.

There is no objection to qualification (a) or (c), but (b), as noted by Sir M. B. Chaubal and by Justice Sir Abdur-Rahim in their minutes at pages 381-82 and 416 of the Report, is a lower qualification in favour of Europeans and Anglo-Indians, which is not at all fair to Asiatic Indians. The clause (b) should therefore be omitted and an equal standard of qualifications insisted upon for all, Indians as well as Anglo-Indians or Europeans, or the Standard for Indians be correspondingly reduced.

In England, the Commissioners noted, the practice is to select candidates on the advice of a Selection Committee, and the rules enjoin that candidates should either have had at least two years' experience of Traffic work on a British or Colonial railway

or possess a University degree or diploma, or a recognised technical diploma or certificate. In so far as it may still be necessary to make appointments in Europe, the present method of recruitment, the Commissioners recommended, should continue, and the only recommendations the Commissioners made in this connection are:—

First, that an officer of the State Railways, being either an officer on the active list or an officer on the retired list within five years of his retirement, should be elected to serve on the Committee of Selection, and

Secondly, that in choosing candidates for appointment, preference should be given to men with experience of railway traffic work.

The qualifications required of candidates to be engaged in England, do not appear to be as high as those required of Indian candidates to be engaged in India. Experience of English railway working is useful but unless it is combined with a University degree or diploma, there is no justification for allowing a higher grade to candidates engaged in England than to candidates engaged in India, as noted in paragraph 13, page 341 of the Report. It is very desirable that all appointments should be made in India.

Locomotive and Carriage and Wagon Departments.

The Commissioners were informed "that appointment in India to the superior establishment of these two Departments would rarely be possible, because under conditions the requisite training for direct appointment is obtainable only in England, and members of the subordinate staff are ordinarily specialists in a particular branch of work without the educational and technical qualifications which would enable them to undertake the higher duties of the departments.

"*These conditions*," remarked the Commissioners, "*should not be allowed indefinitely to continue.*" (The italics are ours).

"The best of the subordinate officers should be given as comprehensive an experience as possible of the various operations of the department, with a view to their promotion in due course to the superior staff. Arrangements should also be provided by which statutory natives of India with suitable educational qualifications would be able to serve as apprentice pupils in the shops and Running-Sheds of the State Railways, and so to reach the standard of professional training prescribed for direct

recruitment. The rule should also be laid down, as for the Traffic Department, that application should not be made to the Secretary of State for the appointment of an officer in England until it has been ascertained that no qualified candidate is forthcoming in India" (paragraph 5, pages 338—39 of the Report).

The technical appointments of the Locomotive and the Carriage and Wagon Departments of railways fall under the third group of Indian services, according to the division made by the Royal Commission in paragraph 32, pages 22—23 of their Report. In these services the Commissioners thought that—

"A determined and immediate effort should be made to provide better educational opportunities in India, so that it may become increasingly possible to recruit in that country, the staff needed to meet all normal requirements."

They mentioned specially the large railway workshops in India to supply the needs of the Locomotive and Carriage and Wagon branches. As all these workshops have technical schools and drawing classes attached to them, all that is necessary is—

(i) To throw them open to Indians, as most of them are at present reserved for Europeans and Anglo-Indians.

(ii) To widen and enlarge the courses of instruction, so as to provide for the superior grades as well as for the subordinate appointments of the technical branches of the railway service.

The Railway and Railway-aided schools in India are shown in an Appendix to the Railway Board's Administration Report, Volume II, but evidently particulars of the Drawing classes and Technical Schools connected with the Loco. and Carriage and Wagon departments, which are almost entirely reserved for Europeans and Anglo-Indians, are not at all shown there. These institutions are maintained entirely at the cost of railway-revenue which is public-money. There is, therefore, no justification for using them exclusively for a particular class of persons to the exclusion of other classes of the public.

For such appointments as may yet be made in England, the commissioners' recommendations are contained in paragraph 2, pages 399-400 of the report. The present procedure in making

these appointments is described as follows:—

Appointments are made by the Secretary of State on the advice of the Consulting Engineer to the India Office. Candidates for the Locomotive department must have had a good general and technical education, followed by at least three years' training in the shops of a railway company and six months' training in the Running Sheds and firing. Candidates for the Carriage and Wagon Department must have served as pupils or apprentices in the Carriage and Wagon or Locomotive shops of a Railway Company or in the Carriage works of a large rolling-stock builder, and in either case must have had in addition at least a year's experience as outside assistant on a British railway. The only changes in this procedure, the commissioners recommended, were—

(i) That preference should be given to candidates who have passed the examination for the Associate membership of the Institute of Civil Engineers or an equivalent test, and

(ii) Secondly, that appointments should be made on the advice of a Selection Committee consisting of a representative of the India Office, the Government Director of Indian Railways, and the Consulting Engineer to the India Office."

To these recommendations no objection can be raised. It is, of course, understood that appointments ought to be made in England only so long as proper arrangements are not made for the necessary training of officers in India. It is disappointing that the Government of India have not yet done any thing for the training and engagement of apprentices for the technical branches of the railway service in India. We need hardly repeat that the conditions as to educational test, rates of pay and system of training should be on a uniform basis applicable alike to all apprentices, whether Indians or Anglo-Indians or Europeans.

Until such time, however, as suitable arrangements are not completed, for the training in India of officers for the Locomotive, Carriage and Wagon, and other technical Departments, the Government should subsidize selected Indian students desiring to proceed to Europe, with suitable scholarships to enable them to qualify themselves for such appointments on the Indian State railways, under the conditions given by Justice Sir Abdur-Rahim in paragraph 63 of his minute at page 417 of Volume I of the Report.

Stores Department.

At present recruitment to the stores establishment is made by selection from among candidates of "good education and suitable social position." The Commissioners agreed that this method should continue but it should be laid down, as for the Traffic department, that the candidates must possess one of the three qualifications already mentioned under the Traffic Department. Our objections in this case are two-fold; first, the expression "suitable social position" is very vague. When a candidate possesses the necessary educational qualifications, there should be no further question of social position, as there is no common standard of social position. What Indians regard a high social standard is not admitted as such sometimes by Europeans. Under these circumstances it is best to accept the educational qualifications and general character of each individual. Our second objection, to this is the same as in the case of the Traffic Department, viz., that the standard of education recommended for Anglo-Indians is lower than that required of Indians and must be changed as we have proposed in the case of the traffic department.

The Commissioners were of opinion that—

"What a Store-keeping officer requires is not so much an advanced training in Engineering as experience of the most suitable method for the purchase and maintenance of stores and for bringing stores transactions to account. Such experience, as well as a knowledge of the uses to which stores are put, can best be acquired in the department itself, and can readily be assimilated by any one possessing a good general education."

We fully agree with these views and are quite at one with the commissioners that "there is no reason why it should not work satisfactorily, provided that only such candidates are selected for appointment as come up to the required educational standard." The commissioners, however, suggested that "other things being equal, it would be of advantage to an officer to have from the outset some knowledge of mechanics," and that "as between candidates of equal educational qualifications, preference should be given to those who had received a training in this subject."

This, we think, is superfluous and is calculated to keep Indians out, as European mechanics with lower educational qualifications might get in. There will be very few candidates, if ever, possessing the three-fold qualifications, namely—

- (i) Good general education up to the degree of a University,
- (ii) Knowledge of book-keeping and stores accounts,
- (iii) Mechanical training.

Organisation.—In point of organisation the various services fall into two main groups, *viz.*,

- (1) Imperial and Provincial or their equivalents, and
- (2) Single homogeneous units.

The arrangement by which the railway management, Traffic, Locomotive, Carriage and Wagon, and Stores departments are constituted as single homogeneous units, without the distinction of Imperial and Provincial Branches, had the Commission's approval (paragraph 24). As regards the Engineering branch of the railway department, the commission recommended amalgamation of the imperial and provincial sections with a single service. "In this way," they added, "we should achieve an organisation of the services based on the work which they are required to do, and not on the race of, or the salaries drawn by, their members or any such artificial distinction" (paragraph 26).

The distinction made in the position of officers promoted from a lower into a higher service, the commissioners thought, "was not only indefensible in principle but mischievous in practice," and recommended generally that promoted officers be given, in future the same opportunities as officers who have been directly recruited. Both should be shown on the same list and take seniority amongst themselves from the date of entry on the list. Promoted officers should also be eligible on their merits for appointment to any post in their service. Except in the case of the Indian Civil services, the commissioners also proposed "that all promoted officers be made full members of the service into which they are promoted." (Para. 27).

To safeguard the interests of Indians specially, the Commis-

sioners recommended the constitution of a Committee for the selection of recruits to all the four different departments of the Railway Revenue Establishment. The appointments by direct recruitment in India are to be made with the advice of a Selection Committee to be nominated by the Government of India. This Committee is to consist of three officials and two non-officials and will include two Indians. The constitution of the committee is to be changed from time to time in order to deal with the claims of the various areas served by the railways, and the commissioners regarded it as important that all vacancies in the Revenue Establishment, which require to be filled either in India or in England, should be widely advertised (paragraph 11 p. 340). The Commissioners in the concluding sentence of paragraph 36 page 27 of their Report stated that "in the long run the surest security for the employment of a due number of Indians lies in publicity and in the watchfulness of the representatives of their interests in the various legislative councils."

System of probation and training.—The regulations for the probation and training of officers appointed to the Railway Revenue Establishment are shown in detail in Volume XIX, Appendices I, II and III and entry 80,877 of the Report of the Public Services Commission, which they approved in paragraph 12, Annexure XIX of the Majority Report.

Means to be adopted for filling various appointments.—In the case of direct recruits, the alternatives suggested were competitive examination on the one hand and nomination on the other (para. 38). After discussing the merits and demerits of both these systems, the Commissioners concluded (para. 44). "Meanwhile we are of opinion that, whilst competitive examinations should ordinarily be continued where they are now held, the time is not yet ripe for the general adoption of any such system" (para. 42). "We, therefore, conclude that, though recruitment by nomination is liable to certain abuses, it may afford an effective method of admitting officers to the public services, provided that safe-guards are introduced to secure—

First, that the impartiality of the selecting agency is above challenge;

Secondly, that publicity is given to the vacancy to be filled, in order that a large field of candidates may be secured;

Thirdly, that the credentials of the candidates are submitted to expert scrutiny;

Fourthly, that outside pressure is not brought to bear on the authorities responsible for making the choice; and

Fifthly, that all recruits possess a minimum educational qualification."

Accordingly they recommended that "as a general rule, where vacancies are to be filled by nomination in any department in India, a Selection Committee be formed, containing an official majority, to advise the Government or other appointing authority. These committees should not be purely departmental in character, but should contain persons in touch with educational institutions, and should have a non-official and an Indian element. Moreover, they should be responsible for giving publicity, to the vacancies as they occur by advertisement, in the papers, by application to the appointments boards of the various universities where such exist, and by any special measures which may seem appropriate in each case. The committees should interview, all likely candidates and place them in order of merit, with reference both to their educational career and to the impression which they have created at their interview and it should be a definite instruction to them to count against any candidate any attempt made to secure on his behalf, through the medium of certificates or otherwise, the good-will of any individual members of the committee."

However well-intentioned these directions may be, no system of nomination will give general satisfaction. The fairest system, to which no reasonable objection can be raised, is open competition, which ought certainly to be adopted for selecting candidates for the Traffic and Stores Departments. As regards the recruitment of officers for the Locomotive and Carriage and Wagon Departments, the matter will be dealt with separately.

Conditions of Salary.

The scale of salaries for the officers of the State railway Revenue Establishment, proposed by the Royal Commission in paragraph 13 pages 341—42 of the Report, was much the same as was in force before, *viz.*, Rs. 200 to Rs. 3,000, per month. This scale, as will presently be shown, is very high and extravagant. The only recommendation the majority of the Commissioners made, was that for increasing the pay of Traffic Superintendent from Rs. 2,000 to Rs. 2,250 per month, the salary of the Agents or Managers being already as high as Rs. 2,500 and Rs. 3,000 per month.

Originally the scale of salaries for State Railway Revenue Establishment was Rs. 250 to Rs. 1,200 per month; it was slightly altered in 1874; the maximum pay for the highest official, the manager of a State Railway, remained at Rs. 1,600 per month upto 1902, except for the manager of the N. W. Railway whose pay was raised to Rs. 2,500 in 1889. In 1908, upon the recommendation of the special Commissioner, Mr. Thomas Robertson, the pay of the manager, N.-W. Railway, was raised to Rs. 3,000, and that of the manager, O. & R. Railway, to Rs. 2,500. That recommendation was made chiefly upon the ground that the companies, working the Indian State Railways on behalf of Government, were paying higher rates of salaries to their higher officials. But it may be noted that the companies paid those salaries not out of their own money but out of the Government money placed in their hands. That was virtually no ground for raising the salaries of the higher officials to such high figures, considering the rates of salaries in force on the Continental Railways in Europe which are given later.

The salaries of high officials of Government in all Departments in India are very high in proportion to the average income of the people who contribute towards the cost of the administration. They take up a large portion of the revenue of the country, so that sufficient funds are not left for the real needs of the people, such as education, sanitation, etc. Taking the rail-

way service, we find the pay of the highest official (Agent or Manager) of a Government-worked State Railway is Rs. 3,000 and on some of the company-worked State railways, Rs. 3,500 per month; while the lowest pay of an Indian adult employee is as low as Rs. 7 per month, giving a proportion of 500 to 1. This is extraordinarily high in comparison with the proportion of the maximum to minimum pay for corresponding posts on European and Japanese Railways as shown below* :—

	Maximum per month.	Minimum per month.	Proportion of maximum to minimum.
	Rs.	Rs.	
1. Danish State Rys.	1,083 kr. = 900	87½ kr. = 73	12 to 1
2. Swedish State Rys.	1,666 „ = 1,387	75 „ = 63	22 to 1
3. Norwegian State Rys.	533 „ = 450	66 „ = 55	8 to 1
4. German State Rys.	1,000 mks. = 750	92 mks. = 69	11 to 1
5. Swiss State Rys.,...	1,250 frcs. = 781	117 fr. = 73	11 to 1
6. Belgian State Rys.	750 fr. = 469	90 „ = 56	8 to 1
7. French State Rys.	1,583 „ = 989	75 „ = 47	21 to 1
8. Japanese State Rys	666 yen. = 1,020	30 yen. = 46	22 to 4

It will be observed that while the proportion in India is 500 to 1, the highest proportion among the above countries is 22 to 1 in Sweden and Japan, and the lowest proportion is 8 to 1 in Norway and Belgium. The maximum salary paid in Sweden is the highest paid in the above European countries, and it is only Rs. 1,387. In Japan it is 8,000 yen per annum = 666 yen per month. One yen is equal to 2s. 0.582d. In India it is Rs. 3,500. These illustrations clearly demonstrate the extravagant rates of pay allowed to high officials in India. No regard is evidently paid to the condition of the masses who are made to pay the extraordinary salaries. No one can deny that India is a poor country and requires a cheap administration. The Secretary of

* The statistics for Europe are for pre-war periods; those for Japan are for the year 1921.

State has often expressed himself in favour of the larger employment of Indians, so as to reduce the cost of administration. In view of the poor condition of the masses of the Indian people, as is evident from the minimum rates of pay for Asiatic-Indians prevailing in the country, and the financial needs for elementary, secondary and general education and for sanitary measures to stamp out the plague, malaria and other preventible diseases, it is imperatively necessary that the cost of administration should be kept down. In fixing salaries of high officials, due consideration should be given to the minimum rates prevailing in the country, and to the income of those who contribute towards the cost of administration. We are not aware of any reason why India should continue to pay higher salaries to its higher officials than the land of the Rising Sun does.

In the case of the Indian State Railways, the majority of the Royal Commissioners approved of the rates in force and recommended the increasing of the pay of one class of high officials, which could hardly be justified in view of the facts noted above.*

In paras. 34 and 35 of the Administration Report for the year 1863-64, the Government Director of the Indian Railway Companies remarked that compared with English Railways, the Indian lines suffered under several disadvantages, among which was the expensive European Agency, which affected all Departments of the railways. Mr. R. W. Crawford, Chairman of the E. I. Ry., observed that considering the work done for the money, the cost of sending men out to India and other matters, the average cost of European labour in India was as 5 to 1 in England.

These remarks were made over 56 years ago, still the Indian railways persist in keeping the number of Europeans as high as they can, although according to Mr. Crawford, it cost five times more than in England.

If the cost of working the Railways is to be brought down, and the intentions of the Secretary of State are to be carried out, then, in the words of the Hon'ble Sir M. B. Chaula,

* But in 1921 the Government of India went beyond the recommendations of the Royal Commission and raised the salaries of higher officials generally.

"The first item of importance in my opinion [and in the opinion of all educated Indians] is the recommendation to improve the permanent source of recruitment to the services in India for complete instruction in technical and scientific subjects, by equipping fully the existing institutions and starting such as do not exist and making them capable of imparting the same high standard of instruction as similar institutions in the United Kingdom do. It is this recommendation which requires to be acted upon, not only to make the proposed entire recruitment in India for some of the services feasible, but in view of the contribution it must make to the industrial development of the country and the impetus it will give to scientific and technical research by Indians in their country" (Page 386 of the Report).

No words are necessary to commend these views. Every Indian approves of them and will be delighted to see them put in practice. Whatever arrangements are made, they should be impartially arranged to allow equal facilities to all, breaking up monopolies where such exist at present. No public institution should be reserved exclusively for any class of persons.

While I was studying the system of education in the Continental countries of Europe, the question which often forced itself on my attention was how could those nations find the money for the magnificent school buildings and the salaries of teachers and other expenses connected with their elaborate system of free and compulsory education; while the Indian Government, we are so often told, is unable to provide funds even for a free elementary education of the people. I could not solve this mystery until I saw the scales of salaries they allowed to their officials. These rates, as may be seen from the figures given for the highest officials of some of the Continental State Railways, are considerably lower than what this poor country (India) has to pay to its higher officials, while menials and lower clerks can hardly get enough to keep body and soul together. In Europe the ruling principle seems to be to give a fair pay to the lowest servants of the State and about 8 to 10 times that rate to their highest officials. Here in India some of the highest Railway officials get as much as 500 times the lowest rate as

already shown. This is most extraordinary. There is no justification for this great variation. A high official ought to be satisfied with the honour of holding the high position and of rendering service to his people, without drawing unduly upon their resources. We do not approve of any official demanding high salaries of over 1,000 rupees per month.

To provide for the real needs of the country, the proper arrangement would be to lay down an Indian scale of salaries for all appointments on one basis, whether such appointments are held by Indians or Europeans. No distinction should be made in favour of or against either class. We are strongly of opinion that no official should get more than Rs. 1,000 per month or 25 times the minimum salary in the Department. This is more than enough. I did not get more than Rs. 600 and that was after a service of $37\frac{1}{2}$ years. For such appointments, however, as may have to be filled by experts not to be found in India, special salaries should be paid to secure their services, taking into consideration the rates prevailing in the country from which such experts are to be brought and the extra compensation necessary to be paid for bringing them out to India. But such appointments should be few and are, not at all in the high proportions in which we find the European and Anglo-Indian element in the Indian services at present.

Restrictions on the employment of Asiatic-Indians.

According to the figures given by the Commissioners, on the 1st April 1913, the appointments on the State Railways (excluding those worked through the agency of companies) were divided as under:—

	Salaries Rs. 200 and above.		Salaries Rs. 500 and above.		Salaries Rs. 800 and above.	
	No.	Per- centage.	No.	Per- centage.	No.	Per- centage.
1. Indians ...	45	10	19	6	11	6
2. Europeans ...	330	74	257	81	155	85
3. Anglo-Indians	72	16	42	13	17	9
Total ...	447	100	318	100	183	100

The total population of India according to the census of 1911 was as follows:—

	Number.	Percentage.
Indians and Burmans	314,856,158	99.91
Europeans including Armenians	199,787	0.06
Anglo-Indians	100,451	0.03
Total	315,156,396	100.00

Taking for granted that all Europeans and Anglo-Indians were literate, the figures for literates stood as follows:—

	Number.	Percentage.
Indians and Burmans	18,239,340	98.38
Europeans and Armenians	199,787	1.08
Anglo-Indians	100,451	0.54
Total	18,539,578	100.00

A large number of the Indians and Burmans were literate in Sanskrit, Persian or Arabic and the vernaculars, while amongst the Europeans about 91,000 formed the army with their wives and children, of the rest a good many were in India temporarily for purposes of Government service or trade, the permanent European population in India being very small indeed.

As most of the Government officers are required to possess a knowledge of the English language (though this should not be necessary in many cases), the population figures of literacy in English were as under:—

	Number.	Percentage.
Indians and Burmans	1,370,149	82.00
Europeans and Armenians	199,787	12.00
Anglo-Indians	100,451	6.00
Total	1,670,387	100.00

In the above table all Europeans, Armenians and Anglo-Indians have been assumed to be literate, which is not true. If statistics were given of those possessing University qualifications, Indians will show a still better percentage. Even taking the above per-

centages, we find that the Europeans and Anglo-Indians combined, who were only 18% of the total population literate in English, held the following percentages of appointments in the three divisions in the total services of India and on the Government-worked State railways:—

	Rs. 200 and above.	Rs. 500 and above.	Rs. 800 and above.
All Departments	58 per cent.	81 per cent.	90 per cent.
State Railways	90 "	94 "	94 "

These percentages clearly show that Europeans and Anglo-Indians have a sort of monopoly of Government appointments, while the proportion of their population is insignificant. In the highest grades the Indians are totally absent. In the lower grades of officers we have but few Indians here and there.

This point was vividly brought out in paragraphs 20—24 (pages 379—382) of his separate minute by the Hon'ble Sir M. B. Chaubal, and the following extracts are quoted below to make the matter clear:—

"If the three communities are taken separately, the percentage of Europeans, Anglo-Indians and Asiatic-Indians (excluding the Indian and Provincial Civil Services) stand at—

48·7, 19·8, 31·5 in the Rs. 200 and above posts.

80·0, 9·7, 10·3 " 500 " "

87·7, 5·9, 6·4 " 800 " "

"The very meagre percentage of the Asiatic-Indians in the higher service ought not to be hidden from view by lumping the Anglo-Indians and the Asiatic-Indians together, under the plausible excuse of the definition of Statutory natives of India in the Act.

And owing to his European education, the Anglo-Indian finds it easier to get a disproportionate representation in the public services of the country. One has only to glance at the figures in the higher service in such Departments as the Salt and Excise, Bengal Pilots, Burma Land Records, Customs, Factory and Boilers, Forests, Indian Finance, Medical, (and Government of India Medical), Sanitary, Military Finance, Northern India Salt Revenue, State Railways, Survey of India, and Telegraphs to see how, as against the pure Asiatic-Indians, the Anglo-Indians have practically monopolised these Departments."

So far as Railway Staff is concerned, this is true not only of the higher appointments in the superior grades, but throughout the services, both in the Subordinate grades and in the Superior grades. As is shown in the summary of the classified List and Distribution Return of the Railway Revenue Establishment given at page 133 herein.

The term "Native of India" has been defined in "Act 33 Vict. Cap. 3 of 1870 to include" any person born and domiciled within the dominions of Her Majesty in India of parents habitually resident in India and not established there for temporary purposes only."

Under this definition, members of the Anglo-Indian and domiciled European Communities have been claiming double privileges. As, for instance, when Indians got a special privilege for appointments in what was known as the Statutory Civil Service, the Anglo-Indians and Domiciled Europeans claimed they were Statutory Indians and should have a share in those appointments. When in the nineties of the last Century, Europeans were allowed the Exchange Compensation Allowance, many of them abandoned their Indian domicile and joined the European class. Now this Allowance has been absorbed in pay, we often hear of "Domiciled" Europeans in India.

How Europeans found the disproportionately large share in the uncovenanted services of India was explained in the following minute dated 15th June 1872, recorded by the Hon'ble A. J. Arbuthnot, while temporarily holding the office of the Governor, of Madras:—

"A class of young men, the sons of European officers of the Civil and Military Services, who of late years, after having failed to obtain public employment in any of the competitive examinations now established, have come out to India in not inconsiderable numbers, armed with letters of recommendation from their friends in England to men in power out here (India), and generally with special reference to the higher posts in what is called the uncovenanted service."

The uncovenanted service included several branches and classes of the State Railway service in India. These are the people who monopolised appointments in the India-recruited Services, like the superior grades of Traffic, Accounts, Stores and Management Departments of railways and higher posts in the clerical services generally, which were meant for Indians. Some of them declared Indians were unfit for higher appointments. Having usurped the appointments meant for Indians, they claimed for themselves the same privilege as regards leave of absence, as was conceded to uncovenanted officers of certain services, who for special qualifications had been obtained from England. The Secretary of State replied in his Financial Despatch No. 451 dated 6th December 1871 that it might be regarded as a general principle, not to be departed from, that "Europeans appointed in India to offices should have no greater advantages of any kind, furlough of course included, than would be enjoyed by Natives holding such posts or offices."*

Although repeated orders have been issued by the Secretary of State that Indians should be largely employed in the higher appointments usually made in India, but the monopolists have evaded all orders on one excuse or another. They are strongly represented in almost all Departments of Government. How far they have carried out the orders is evident from the actual employment of Indians. They often bring out ingenious arguments to show that Indians are unfit to do this or that. Sometimes to support such arguments, they appoint Indians of questionable qualifications; at other times they drive away competent Indians by offering low emoluments, and so forth.

Audit and Accounts Branch.

The Audit and Accounts Department, of Indian State Railways forms part of the Indian Finance Department, which is under the direct control of the Government of India. At the head of the department is the Comptroller and Auditor General. Of the

* Same Gazette of India.

nine Accountants-General, one is in charge of the Railway Accounts section. Its superior staff numbered 172 officers, below whom were 34 officers designated as Chief Superintendents and Chief Accountants receiving salaries ranging from Rs. 450 to Rs. 750 per month. For the future the Department is to be recruited for entirely in India. The Commissioners recommended that 3 out of every 5 vacancies to be filled by direct recruitment should be thrown open to candidates nominated without distinction of race. But what would prevent a larger number of Anglo-Indians being nominated? The remaining 2/5ths of the vacancies are to be filled by direct appointment without examination of candidates possessing an educational qualification at least equivalent to the Bachelor's degree. Such appointments are to be made by the Government of India on the advice of a selection committee consisting of 5 members, two of whom shall be Indians.

The rates of salary are to be reduced for future entrants from Rs. 300—50—1,250—50—2—1,500 to

Rs. 300—50—2—500—50—1,050,

with Rs. 200 during the period of probation.

No change was proposed in the pay of administrative grades beyond the conversion of the graded salaries payable to Accountants-General into an incremental scale of Rs. 2,000—125—2750.

For officers in Class I a scale of Rs. 1,200—60—1,500, and for officers in class II (the old class III) a scale of Rs. 300—50—2—500—50—1,050 a month, with a probationary rate of Rs. 200 a month should, the commissioners remarked, be adequate under the altered condition of recruitment, to attract candidates of the M. A. class to the department. For Indian Civil Servants, under training, they recommended a scale of Rs. 1,500—60—1,800 a month. These proposals were to effect a saving of Rs. 2,11,319 a year.

Engineering Department.

The recommendations of the majority of the commissioners in regard to this Department are contained in annexure XVIII of

the Report. Their principal recommendations were :—

‘ 1. That recruitment is to be made partly in England and partly in India. So long as the cadre remains at its present strength, the number of vacancies allotted to the four Indian Colleges (Rurki, Sibpur, Madras and Poona) will be increased from $9\frac{1}{2}$ to 13 annually, when the arrangement, by which 10 per cent. of the vacancies filled in England are reserved for Indians, is abolished.”

On this Justice Sir Abdur Rahim remarked that if this suggestion for the abolition of the 10 per cent. be meant to discourage Indians expecting appointment in England, “I wish entirely to dissociate myself from it. On the other hand there should be no hesitation in appointing as many Indians as are found to be well-qualified.” We fully agree with these views.

“ 2. That the present Imperial and Provincial services should be amalgamated into one service, and the rates of salary of officers recruited in England and in India be as shown below :—

- (i) Assistant Engineers from
 - 1. England Rs. 380—40—700—50—750.
 - 2. India Rs. 300—50—2—500—50—550.
- (ii) Executive Engineers promoted from
 - 1. Rs. 800—50—1,250.
 - 2. Rs. 600—50—1,050.
- (iii) Superintending Engineers from both,
 - Rs. 1,500—100—2,000.
- (iv) Chief Engineers from both,
 - Rs. 2,500—50—2,750.

To these recommendations Justice Sir Abdur-Rahim attached the following dissent :—

“ 245—Salaries. “ The scale of salaries, which I propose for the Assistant Engineers appointed in India, is Rs. 300—50—2—500 ; and for the Assistant Engineers appointed in England, I propose a scale of Rs. 380—40—700. For the Executive Engineers there should be one scale of pay for all, namely Rs. 750—50—1,250. I do not agree in the proposals of the majority, which have the result of increasing the pay of the Superintending and the Chief Engineers by nearly Rs. 83,000 a year ” (Page 474 of the Report.

The present scale of pay for Superintending Engineers is Rs. 1,200—2,000, and of the Chief Engineers, Rs. 2,500—2,750 per month.

3. The qualifications of officers recruited in England were recommended to be one of the University Degrees or an equivalent diploma or distinction in Engineering (not merely the A. M. I. C. E.), with at least 12 months' practical experience of engineering work and in the case of candidates for railway department, practical experience on a British Railway to receive special weight.

In the case of recruits to be selected in India, the maximum age was to be fixed at 27 years.

Subordinate grades of State Railway Establishment.

In dealing with the matter relating to the superior grades of railway services, we have shown how Indians have been kept out of those grades. Now it is proposed to deal with the subordinate grades and office clerkships.

There are certain ranks of subordinates, to which Indians are not generally admitted. Take, for instance, the posts of Inspectors employed in the Traffic, Locomotive and Carriage and Wagon Departments, Workshop Foremen, Assistant Foremen, Chargemen, etc., Of course there is no rule against the employment of Asiatic-Indians to these posts, but the Anglo-Indians, in whose gift these posts are, will not train Indians for such posts. As will be shown later, orders were received from Her Majesty's Secretary of State for India, as early as the year 1870, for the training of Asiatic-Indians for all such posts, but effect has not yet been given to those orders, so far as the training of Asiatic-Indians is concerned, although 47 years have elapsed since then. In the Classified List and Distribution Return of Railway Establishment published every half-year by the Indian Railway Board, we find not even one Asiatic-Indian in these posts in the whole of India.

Educated Indians are employed only in the lower posts in the Railway offices and at stations. A few of the office hands, by the dint of their character and good luck, win some of the upper posts, but a very large majority of them are kept down in the lower ranks. Any attempt on their part to rise in position is

met with rebukes, so that they may not aspire to any higher posts. In the seventies and eighties, Asiatic-Indians had fair chances in the office clerkships ; but through the activities of the Anglo-Indian Associations, it has been practically arranged, with the Heads of Railway Administrations, to employ Anglo-Indians mostly in the higher posts in offices as well as in the out-door posts of subordinate establishment of all Departments. No rule to this effect appears to have been laid down but such is the general practice on almost all the railways in India, whether they are worked by the Government or by the Companies.

The most unsatisfactory position in the Railway Service is that of Indian clerks. They are worked hard and paid miserably. Their condition requires very serious attention of the members forming the branch. Most of the higher posts in the branch are given to non-Indians, who are started on higher salaries and given rapid promotions, while Indians are generally started on low rates and kept down in the lowest rungs of ladder, throughout their service. Their position is unenviable. Educated as they are, above the ordinary level, found in any country, whether in the East or in the West, they are still wanting in one essential, which alone can improve their position. I mean union among themselves. I have been seriously thinking over this for years past, and I have traced the root-cause of their weakness. I attribute it to the uncertainty of their dues and to the autocratic powers which individual officials are allowed to exercise in the matter of appointment, dismissal, promotion, leave, passes and other privileges. I do not however entirely absolve the men from blame for their weakness but if the discretionary powers of individual officials be abolished, the men would act freely. No improvement in the conditions of their service seems possible, unless one of the two alternatives is adopted. The first is that the authorities should invest the powers of appointment, dismissal and promotion in a committee of three officers. This will stop favoritism and greatly improve the service and efficiency of Administration. The other remedy is that the men should take

steps to stop the overcrowding of the service by taking mechanical work and other lines of business.

In Railway workshops, Asiatic-Indians are employed as workmen, who can rise no higher than to the post of a *Mistry*. Educated Indians are given no encouragement to join as apprentice mechanics; those who apply for these apprenticeships are offered so low terms that they find it better to join as office clerks.

As a rule appointments as well as prospects of the subordinates are in the hands of the Superior officers. Since Indians do not hold the top-posts of Agents or Heads of Departments, they are kept down in the subordinate posts also. For this reason it is necessary for Indians to fight, not only for their rights and privileges in subordinate grades but also for their full share in the superior grades, because unless they occupy the higher positions, justice will not be done to them. There will be no body to properly protect the cause of the Subordinates and the monopoly of others would continue for an indefinite period. It is for this absence of Indians in the higher offices that Indians have been kept down also in the lower grades during the last 50 years or more.

At one time there was a rule which laid down that Asiatic-Indians were to get not more than two-thirds of the pay allowed to Europeans for the same class of work. This rule used to apply to high appointments like those of High Court Judges, but in their case it has practically become obsolete. In the case, however, of Subordinate railway services, it appears still to be in force, for we find the following rule appearing as Note (2) to para. 230 of the State Railway Open Line Code, Volume II, 1908 edition:—

"The maxima salaries for Native Drivers, Shunters, and Guards are fixed at two-thirds of those for European. Parsees are not Europeans and can only, therefore, be allowed the rates of pay laid down for natives."

This code applies directly to lines worked by the Government Administrations, and similar rules are in force on the State Railways worked by Companies. This is directly opposed to the orders of the Secretary of State of 1871 quoted on page 158.

It is hoped the Government of India will immediately withdraw this obsolete ruling in the case of the lower subordinates of the Railway Establishment, in view of the following views expressed by the Royal Commission in paragraph 55 of the Report signed by the majority of the Commissioners:—

“The advantages of equal pay for all officers, who do the same work, are obvious. Under such a system there can be no suspicion that Europeans are favoured at the expense of Indians, whilst the danger of racial friction in the services is reduced to a minimum.”

The Commissioners, however, recommended certain distinctions in salaries between Indians appointed in India and Europeans appointed in England, on the ground of higher cost of training in Europe. That ground is certainly inapplicable to Europeans and Anglo-Indians appointed in India to the subordinate grades. Whatever grounds may have existed in the past for the distinction between Asiatic-Indians and Anglo-Indians as shown above, there is no justification now for treating the former differently.

The treatment of Asiatic-Indians whether on out-door work or in offices in all Departments, *viz.*, Management, Traffic, Locomotive, Carriage and Wagon, Stores, Engineering, Audit and Accounts, etc., on all railways whether worked by Government or by companies, is that accorded to an inferior race. Formerly this prejudice did not exist in the form in which it is now openly seen. From the older orders received from the Secretary of State for India, it is evident that the Government meant to do full justice to Indians in the Railway services. Indians were formerly taken at least in the clerical lines without any restriction of the sort, which was openly started since the Imperialistic movement had been set on foot in India and a mark of distrust placed upon Indians. A marked distinction was made between Indians and Europeans or Anglo-Indians to the detriment of the former. Indians were persistently put down as inferior, although in many cases they possessed superior merits, so that Indians may not aspire or have an opportunity to rise to the superior grades. Indians of all grades on the Indian railways complained of the preferential treatment accorded to Europeans.

and Anglo-Indians, and the result was the growing discontent and unrest. Anglo-Indians were given higher salaries at the start, and allowed rapid promotions, while Indians were started on lower pay and systematically kept down throughout their service, or were not allowed to enter certain posts. Anglo-Indians of Europeans, possessing no superior educational qualifications, were often put over Indians of greater merit, longer service and superior educational qualifications; they were given rapid promotions from class to class and from grade to grade; so that the senior Indians became subordinates of those who were at one time their (Indians') own assistants. This is very galling indeed. No Englishman would put up with such treatment. Indians feel it quite as much as Englishman would, if they were similarly treated in their own country.

Some of the Railways publicly advertize exclusively for Anglo-Indian candidates, whenever they have to fill vacancies in certain grades. A policy was secretly adopted on the State Railways, whereby Asiatic Indians are kept in the lowest positions, and higher posts, even in the subordinate grades and in the clerical branches, are generally given to Europeans or Anglo-Indians.

Mr. T. Ryan, officiating Secretary to the Indian Railway Board, in paragraph 80,984 of the evidence before the Royal Commission, in answer to a question by Sir Valentine Chirol, said: besides a business concern, the railways "were also a necessary factor in maintaining the security of the country both from a military point of view and from the point of view of internal security, and that had to be taken into consideration in dealing with the recruitment of the staff. He thought, however, that a staff which could be relied on for the safe-working of the railways should be adequate also from the military point of view. In fact the question of more immediate importance was the safety of the public, and this necessitated a very large reliance for the present upon European officers."

This explained why Indians were not trusted as they should

be on their own Railways, and accounts for the extraordinary concessions and privileges and the disproportionately large number of appointments, which were allowed to Europeans and Anglo-Indians, nay, even to Indian Christians, on the Indian State Railways, under secret directions. It need hardly be said that there is no ground to justify this distrust so far as the conduct of the Indian staff of State Railways is concerned. These men have in the past worked and are still working loyally for the Government. In fact most of the work in all the departments of the railways, whether indoor or outdoor, is done by Indians; while Europeans and Anglo-Indians are employed on easy light work of what they are pleased to call supervision and signing of documents wholly worked out and prepared by Indians, who are unjustly kept down in the lower positions during the whole term of their service. It is notorious that many of the Anglo-Indians are unfit for any hard or tedious work. By this we do not deny the fact that some among them are highly capable, but such are the exception rather than the rule. They are, however, given soft work, good pay, rapid promotions and numerous other privileges in house accommodation,* education of their children, volunteering, leave, free-passes, which are openly denied to Indians.

The rates of pay allowed at present to Anglo-Indian apprentices in Locomotive and Carriage Shops are sufficiently high for the subordinate grades, while the rates laid down for Indians are so low that young men of higher educational qualifications are

*On housing of the European and Anglo-Indian Staff of Indian railways, public money is freely spent, so that the houses bear a resemblance to the mansions of the wealthy citizens of a London. This is what the late Sir Juland Danvers was surprised to find after a personal tour of inspection. In his Annual Report on the Indian Railways for the year 1875-76, he wrote :—

"38. At certain places on most of the railways, where more Europeans than usual of the mechanical class are brought together, consisting principally of drivers, and those who belong to the locomotive workshops, dwellings are provided which collectively form a kind of railway town. On approaching these places they present quite an imposing appearance. Large square brick-houses are seen placed in compounds or gardens bearing a resemblance to the villas and mansions occupied by the wealthy citizens of a London."

not attracted. They are thereby practically debarred from entering the railway workshops, while one of the European witnesses, who gave evidence before the Commission, said that the work was not suited to Indians, that they did not like mechanical work and complained that the work was dirty, that the men they had to work with were lower than themselves, and that the pay was not enough (see paragraphs 81260, 81269 and 81272 in vol. xix). The last point alone conveyed the real truth.

Against the above opinion of a European Locomotive Superintendent of State Railways, we have the opinion of Mr. T. W. Tutwiler, the General Manager of the Tata Iron and Steel Works, which he gave before the Indian Industries Commission. In his opinion, Indian Workmen are "very intelligent and quick to learn", "more amenable to discipline than the foreigner." One of the reasons, he urged for the employment of Indians in preference to foreigners, is that they are better able to impart instruction to workmen as they know the language and the ways of the workmen and another reason is that they would cost much less. From his experience he could say that where Indians were substituted for Europeans, the work had not suffered either in quality or quantity.

Similar opinion was expressed in 1908 by Mr. A. T. Houldcroft, late Carriage and Wagon Superintendent of the B. B. & C. I. Railway.

The present writer, from his personal observations in large mechanical works, both in India and in Europe, extending over a period of more than 20 years, is of opinion that Indian mechanics are second to none in skill and perseverance, and in fine work they are far more patient and artistic than any found in modern Europe.

It may be noted that the evidence recorded by the Royal Commission on the Railway Department, was taken from European or Anglo-Indian officials only: although written statements were submitted by three Asiatic-Indians, *vide* items 1, 9, and 10 of appendix viii, page 110 of volume xix of the Report, none of them

was called before the Commission to give oral evidence. Even their written statements were not embodied in the evidence. The whole of the evidence recorded in that volume was therefore one-sided and cast vague and unfounded reflections against Indians, which Indians were allowed no opportunity to refute.

Training of Officers and subordinates for the technical Departments of State Railways.

As already stated the recommendations of the Royal Commission are that

"A determined and immediate effort should be made to provide better educational opportunities in India, so that it may become increasingly possible to recruit in that country (India) the staff needed to meet all normal requirements."

Upon this the Hon'ble Sir Mahadev B. Chaula in paragraph 19 of his separate minute (page 379 of the Report) remarked:—

"This recommendation has my full concurrence, and I only wish the the recommendations as regards these services be given effect in practice with the same sympathetic spirit in which they have been conceived. The fear entertained as regards these services is that perhaps an indefinite length of time may be taken in 'Indiaising' them and that as they become India-recruited, Asiatic-Indians would not be selected for them in due proportion, and they may become like the present recruited-in-India services, in which, as pointed out later, the proportion of Asiatic Indians to Europeans and Anglo-Indians is only 23, 8·2 and 6·3 per cent. in posts with salaries of Rs. 200 and above, Rs. 500 and above, and Rs. 800 and above, respectively."

These fears are very well-founded, for has not the European and Anglo-Indian combination completely kept Asiatic-Indians, during the last 47 years, out of the appointments of Foremen mechanics, which were ordered by the Secretary of State for India in 1870 to be made entirely in India from among Asiatic-Indians, and Europeans or Anglo-Indians.

The recommendations of the Royal Commission are for the superior officials, and apply with greater force to the subordinate staff as well. As regards the latter, a similar direction was received from the Secretary of State for India in 1870 and was circula-

ted to the Local Governments and Administrations in Government of India P. W. D. Circular No. 35 dated 29th June 1870 (See Supplement to the *Gazette of India* dated 23rd July 1870), in which the Government of India strongly impressed on the superior officers of the Public Works Department, the great advantage "of endeavouring, as far as possible, to train the natives of the country in all those branches of handicraft that are necessary to the construction and maintenance of railways." It was pointed out that every large work of the magnitude of a railway or canal, and every shop in connection with such, forms a training school for artizans; and from these, there is no doubt, that some suited for the position of foremen could be obtained." To ensure this result it was expressly enjoined that "it will probably be necessary to attach a school to each large shop, which likely men should be encouraged to attend, and those that give promise of rising to the responsible position of foremen should be helped, and their practical knowledge supplemented with theoretical training and some instruction in drawing." "The success of the experiment," added the Government of India, "will of course depend mainly on the tact and judgment and energy of the men at the head of the Shops; but His Excellency in Council sees no reason to doubt the successful issue of the experiment, if the object is put before these supervisors as one to which the Government of India attaches much importance, and if the Local Governments interest themselves in securing its accomplishment."

These orders were issued in the year 1870, i.e., 47 years ago, but what do we find as a result of those orders? Not a single Asiatic-Indian has up to this time found a place in the list of Foremen Mechanics throughout the Indian Railways. Technical Schools with Drawing Classes and Night Schools for general education of apprentices have been established in connection with the Locomotive and Carriage and Wagon workshops of all the principal railways in India since those orders were issued but almost all of them have been reserved exclusively for European or Anglo-Indian lads.

On the R.-M. Ry., Schools of the above description were open in 1880, exclusively for Europeans and Anglo-Indians, in the Locomotive Workshops at Ajmer.

About the year 1897, when I was in the Head Office of the Carriage and Wagon Department at Ajmer, I persuaded the Carriage and Wagon Superintendent to open a Drawing class and a Night School for Indian apprentices at Jonesganj. After several years the Locomotive Superintendent also opened a small school for Indian boys of his shops, with lower rates of pay, *viz.*, half of those which had been fixed for the Jonesganj class. After useful work for 19 years, the Jonesganj Drawing Class and Night School were closed in 1916. They gave instruction to 20—40 boys annually during their existence, and turned out some good mechanics, but it is a matter of regret that they were closed by the new Carriage Superintendent and stipend of Indian apprentices was reduced to 4 annas per day.

Probably other railways in India have recently started for Indian apprentices similar schools of a lower grade than those for Europeans and Anglo-Indians. In these schools sons of illiterate workmen, already employed in the Workshops, were admitted, but educated Indians were practically kept out by the low rates of wages offered. While Anglo-Indian apprentices were on some of the railways allowed Rs. 20—25 per month, to begin with, rising by annual increment to Rs. 50 per month in the fifth or final year of apprenticeship, Indians were allowed only 4 annas per day, about Rs. 6-8-0 per month, in the first year, rising to 10 annas per day or about Rs. 16 per month in the fifth year. And the training given to Indians was of a lower grade, so that they could not expect to rise beyond the post of a *Mistry* or Carriage Examiner. Of course there were a few exceptions.

The question now before the Railway Board and the Government of India is how to give practical effect to the recommendations of the Royal Commission. As the noble wishes and instructions issued by the Government of India since 1870 have been somehow nullified, it is doubly necessary to lay down the

rules and orders in such a manner that there should be no loophole for evading them in future. The rules and orders now necessary are required not only for the subordinate grades but also for the superior grades of the Locomotive and the Carriage and Wagon Departments, including the Electrical and Signal Departments of all State Railways, whether worked by the agency of Companies or by the direct agency of Government.

The following proposals are submitted for their consideration :—

(1) The technical schools at present established in connection with the Locomotive and Carriage and Wagon workshops of State Railways, worked by Government and by companies, should be thrown open to Indians, wherever they are reserved for Europeans and Anglo-Indians, and the courses of instruction widened and raised, so as to provide classes both for the superior and the subordinate grades of these Departments.

(2) Uniform rules may be laid down for the admission of apprentices, Indians as well as Anglo-Indians or Europeans, together with uniform scales of stipends and future prospects.

Both these questions should be considered by a committee of Railway officers with an equal number of representative Indians. These arrangements, as remarked by the Royal Commission, can be made without much expenditure, and should be made immediately, so as to secure an adequate number of officers in India to meet the normal requirements of the technical Departments. (Paragraphs 32 and 35, pages 23 and 27 of the Report).

No educational qualification was given by the Commissioners for apprentice pupils to be taken in the Locomotive and Carriage and Wagon Workshops and Running Sheds for professional training up to the standard prescribed for direct recruitment. This standard was given in the case of recruits selected in England as follows:—

(i) Candidates for Loco. Department must have had a good general and technical education, followed by at least three years' training in the

shops of a railway and six months' training in the Running Sheds and firing.

(ii) Candidates for the Carriage and Wagon Department must have served as pupils or apprentices in the Carriage and Wagon or Locomotive Shops of a railway or in the Carriage Works of a large rolling-stock builder and in either case must have had in addition at least a year's experience as outside assistant on a Railway.

The Government of India will have to lay down the requisite qualifications which, it need hardly be repeated, should be of one uniform standard for all apprentices, whether pure Asiatic-Indians or Anglo-Indians or Europeans. As the training of apprentices will take more than $3\frac{1}{2}$ years, it is desirable that the apprentices should begin as early as possible after they have acquired the necessary general and technical education.

I consulted in June, 1911, the late Mr. Robertson of the firm of the Government Consulting Engineers in London, Messrs. Rendel and Robertson, 13-14 Dartmouth Street, London, who was good enough to say that the proper training for a Locomotive or Carriage and Wagon officer's line takes about seven years, say from the age of 17 to 24, *i.e.*, three years for the theoretical course in an institution like the Manchester School of Technology, and four years for practical training in a workshop.

The famous firm of Messrs. Vickers Limited took paid apprentices for training in their works at Barrow-in-Furness, between the ages of 15 and 18 years, selected by half-yearly examinations, held in January and July of each year in the following subjects:—

Arithmetic—To Vulgar and Decimal Fractions; Mensuration of Plane Figures (*including properties of triangles*), and capacities of Tanks and Vessels. Use of contracted methods.

Algebra—Fundamental Rules; Simple Equations and Problems producing same.

Geometry (*Plane*).—Properties of Triangles, Circles, Rectilineal Figures. Simple Graphs.

Geometry (*Solid*).—Principles of Elementary Projections with simple Sections and Side Elevations.

All apprentices were advised to enrol themselves at the beginning of their apprenticeship as students in one of the local Even-

ing Schools, or, if properly qualified, in the Technical School, and to take one of the full courses of instruction set out in the prospectus issued by the Local Educational Authority. Provided that satisfactory evidence was given of regular attendance throughout the session, such apprentices might, as vacancies arose, compete for entry into the Drawing office.

The firm allowed apprentices permission to attend a Technical College and counted the time spent at the college (in no case exceeding two years), towards the completion of their apprenticeship, which took five years from the date of commencement.

The firm undertook to give such apprentices employment during college vacation, at rates of pay corresponding to the year of service, counting the years as continuous; and allowed prizes and scholarships to encourage the apprentices.

If India were to adopt a similar course, it would be proper to prescribe the matriculation test for admission of apprentice pupils for the superior grades of the Technical Departments, and the middle school test for the subordinate grades.

The people of India have been requesting the Secretary of State to secure the admission of Indian students to the Workshops of those companies in England which supply stores for Indian requirements. But they seem never to have thought of the score of the central workshops, besides the numerous district workshops, existing in our own country, belonging to our own State Railways, where technical training can be given to Indian students, only if the Government of India made the necessary arrangements with the Railway Administrations. The larger workshops are established in all the provinces of India.

The workshops may find a training ground for mechanics and Mechanical and Electrical Engineers, not only for the Indian railways, but also for many other classes of industrial works for India. The attention of our Government and the leaders of the public is specially drawn to the facilities available in our own

country. To make India self-supporting, the railway workshops, where wanting in up-to-date machinery, should be supplied with the best and latest equipment.

SECTION 7.—The Indian Industrial Commission and Railway Workshops.

(Written in 1913.)

After reading the Report of the Indian Industrial Commission 1916-18, one is forcibly struck with the fact that India is sadly behind other civilised countries in the industrial line and in times of war its position becomes not only helpless but extremely dangerous. It seriously needs a thorough overhauling of its educational system and requires a number of Technical Schools, Engineering Colleges and Institutes of Technology. The foundation for technical instruction and training should begin from the elementary schools, where elementary drawing should be taught as a compulsory subject and physics and chemistry and carpentry and smithy included as optional subjects. In every town of importance, we should have a technical school, where theory and practice of all trades and industries should be taught to those who are likely to take the industrial line as their life's career. Larger cities or centres should have higher technical schools and engineering colleges, while higher Institutes of Technology should be provided at selected centres.

The provision of new or independent technical schools, etc., may take time and require large sums of money. In the meantime, I desire once more to draw the particular attention of the public, to the provisions which already exist in the Railway workshops in India, in a large measure, for the practical as well as theoretical training of the youth, for mechanical and electrical engineering, which require but a comparatively small amount of money, for first equipment and for recurring expenses, and are admirably suited for the purpose.

In the preceding Section, the subject of practical training of officers and subordinates for the Technical Departments of Indian State Railways has been dealt with and it has been pointed out that great facilities are available in the Locomotive and Carriage and Wagon workshops of Indian Railways for the training of the Indian youth for technical work generally for railways and other industries. In October 1917, the Provincial Conference of the United Provinces held at Sitapur passed the following resolution:—

"xvi (u). This conference requests that the Locomotive and Carriage and Wagon workshops of Indian State Railways, whether worked by the State or through the agency of companies, Government Dock Yards and other State Factories, be made available for the practical training in Mechanical and Electrical Engineering, that the existing Technical schools and Drawing classes attached to the Railway workshops be thrown open to Indians wherever they are reserved for European or Anglo-Indian apprentices, and uniform rules, conditions, rates of pay, and educational qualifications applicable alike to apprentices of all races or creeds may be laid down; and improvements where necessary may be made in the teaching staff and appliances, so as to make it increasingly possible to turn out men of both the superior and subordinate grades to meet all normal requirements."

And in my evidence to the Industrial Commission, I particularly drew attention to the great facilities available in the Railway Workshops. It is satisfactory to note that the main points urged by me were brought out and supported by the Indian Industrial Commission; they observed that "by far the most important development of mechanical engineering in India is represented by the numerous Locomotive and Carriage-building shops which are an essential adjunct to the Railway system." The Commission mentioned over seventy such shops. A score of them are of large dimensions and are well-equipped with a variety of machinery needed for almost all classes of mechanical work. (Page 25 of the *Report*). The Commissioners were much impressed by the great possibilities for training in mechanical engineering in these workshops "which are so distributed as to form convenient centres in almost every major province of India." (Page 116). Some of these workshops have been in existence for a period of over

50 years, and if they were properly utilised for the training of Indians in mechanical work as ordered by Her Majesty's Secretary of State for India in 1870, we should have had to-day a large number of Indians properly trained not only as Chargemen and Foremen, but also as mechanical engineers occupying positions in the superior grades of Superintendents and Assistant Superintendents. But what did the Commission find?—They "*were forcibly struck when visiting the large railway and private workshops throughout India, with the complete absence of Indians from the ranks of Foremen and Chargemen.*" (Page 118). The italics are ours. "Very few Indians" have been allowed to rise "to the ranks of foremen and still fewer have been appointed to the superior establishment," (Page 26).

The orders were issued in 1870 and the results so far are shown above in the words of the Industrial Commission. The orders were expressly meant for the training of *Indians* in technical schools and drawing classes attached to the workshops, but they have been applied to *Europeans and Anglo-Indians only*. Asiatic-Indians have been almost entirely ignored. The schools and drawing classes are no doubt attached to each of the large workshops of the principal Indian Railways, but they are either reserved for non-Indians or Indians are allowed only a secondary place and this has been but recently allowed. The restrictions against Indians are still in force and in Appendix N to the Commission's *Report*, to which a reference will be made hereafter, it is still proposed to keep Indians down in number.

Some of the European Officers in charge of the Railway workshops are under the impression that Indians do not like mechanical work, that they prefer clerical work, or are incapable of doing the former. These complaints are devoid of truth. The Commissioners expressly discarded them. In fact Indians have not been allowed an opportunity of showing their worth or exercising their choice. They have, on the contrary, been discouraged by these very critics. Wherever an educated Indian makes an attempt to take up mechanical work, he is discouraged.

by such low stipends and low prospects as no one would care to accept. They have thus been driven to clerical work, which gives them at least a better start. They get 20 or 25 rupees a month to begin with in the clerical line, while Rupees 6 or 7 a month only is offered for the mechanical work. The Commissioners but mildly put case when they stated that—

“It is doubtful if sufficient inducement in the way of pay are yet held out to men to become a really first class artisan.” (Page 117).

At another place they observed that—

“The stipends and prospects offered are not of a nature to induce the better educated classes to spend a number of years as workmen.” (Page 118).

Will the Government see that sufficient encouragement is given to Indians and proper facilities are provided for their training? This is only possible when race or religious distinctions are completely removed.

The observations and recommendations of the Industrial Commission are summed up in para. 152 of their Report which is reproduced below:—

“Railway workshops are, as we have stated, in many cases already receiving European and Anglo-Indian apprentices, to whom some degree of technical training is given with the object of enabling them to obtain posts as foremen or in special cases, even higher appointments. *There is, however, a noteworthy absence of provision for the middle-class Indian.* We consider it of great importance that the conditions of training should be such as the educated Indian youth will consider consistent with his sense of self-respect; for if this is not satisfied, we shall be depriving ourselves of a most promising field of recruitment. *The arrangements made for Indian apprentices are at present inadequate; and the stipends paid them during the period of training and the salaries offered on its completion are very much lower than the corresponding amounts in the case of Europeans and Anglo-Indians, a fact which is largely responsible for the failure of the better educated Indians to take advantage of these courses.* As regards salaries, we consider that the principle must be adhered to that equal proficiency should be equally remunerated. The inequality of stipends is to some extent justified by the difference in the standard of living between Europeans and Anglo-Indians on the one hand and some classes of Indians on the other, though the stipends at present

offered to Indians assume too low a cost of living to meet the case of the educated middle classes. We think the difficulty might be got over by allowing free board and lodging to all Europeans and Anglo-Indians, and to such Indians as prefer it. To other Indians, a stipend to cover board expenses, based on the standard of living of the middle class, should be given. Apprentices of all kinds should receive a monthly sum over and above the expenses of their board and lodging, depending on the length of time they have worked and on their efficiency in the shops. We consider that every effort should be made to develop the training facilities existing in these shops, grants being given from Government fund for the establishment of technical classes, together with hostel accommodation and such other amenities as are necessary to attract educated Indian youths of the middle class. The precise allotment between Government and the Railways of the extra expenditure entailed will require further consideration. With the technical school alongside the workshop, it becomes possible to provide an almost ideal course of training. Almost equal possibilities for training can be made available in a few of the larger private workshops, and we do not doubt that the managements of these would welcome the provision of similar arrangements for the technical training of their employees. In discussing the question of training industrial artisans, we have suggested the adoption of an apprenticeship system, and we think that a precisely similar system should apply to the more advanced class of students with which we are dealing. *The regulations for the admission of apprentices and for the working of the system generally should secure the admission of a proper proportion of Indians and the fair and equal treatment of all classes in their course of training, while upholding the authority of the workshops management to the fullest extent. The indentures should be for a period of four or five years, and, as we have said already, the apprentices should be paid wages. Apprentices of this class should start work usually between 16 and 18 years of age. If they enter the workshops at too early an age, their physique will be insufficiently developed to stand the stress and their previous opportunities for obtaining the necessary education will be unduly restricted.*

An example of a scheme of this type, worked out by officers of the East Indian Railway Company, will be found as Appendix "N."

The italics are ours. Most of these recommendations are satisfactory. The only point to which exception may be taken is, about the line drawn between European or Anglo-Indian and Indian apprentices on the so-called standard of living. The

difference is mainly in the way or manner of living and should not be emphasized. The only fair and equitable arrangement would be to treat apprentices of all creeds alike and to give them equal terms, equal facilities, and equal training.

According to his custom of living, a European or Anglo-Indian apprentice can live comfortably in a boarding-house or hostel, which an Indian sometimes cannot do if the boarding-house is kept on European system. The proposal of the Commissioners allows fully what is needed or is at present allowed to Europeans and Anglo-Indians, but it does not concede what is necessary for the Indians. Their proposal to allow Indian apprentices "a stipend to cover board expenses based on the standard of living of the middle classes," would leave the matter still in an unsatisfactory state. To place the matter on a satisfactory basis, equal rates of stipend and board allowance should be allowed without distinction of race, creed or colour. If the matter be left to the discretion of Superintendents of workshops, who at present are Europeans or Anglo-Indians only, they will continue to "assume too low a cost of living to meet the case of the educated middle class", as has been the case so far.

Appendix "N" to the Report of the Industrial Commission embodies the scheme of a proposed Technical school in connection with the E. I. Railway workshops at Jamalpur. It shows that at present European and Anglo-Indian apprentices are engaged on a five years' indenture, and Indian apprentices of two classes are also appointed, with stipends as under:—

Europeans and Anglo-Indians, Rs. 30 rising to Rs. 50 in 5 years.

Indians 1st class	...	...	Rs. 10	"	to Rs. 15	"
2nd class	...	...	Rs. 4	"	to Rs. 9 in 6	"

These stipends are absurdly low for Indians, and the proposed scheme provides for the training of 195 European and 56 Indian apprentices. Considering the large number of the Indian population, the numbers of apprentices proposed are very disproportionate. The future stipends for both races are proposed at

Rs. 15 per month, but boarding allowance is proposed at Rs. 34 per month for Europeans and at Rs. 15 for Indians.

This is wrong again; the rates should be equal for both.

"For Indian apprentices a separate hostel would be provided but in other respects the boys would all work together and no distinction would be made between Europeans and Indians." This is as it should be.

In connection with railway workshops or large engineering establishments, the Commissioners proposed the establishment of ten schools, each capable of dealing with about 200 apprentices. These schools would be located alongside suitable existing workshops, which would result in the following distribution:—one each in Madras, the United Provinces, the Punjab, Bihar and Orissa, Burma and Assam, and two each in Bengal and Bombay (para. 372, page 268). So far as these provinces are concerned, the proposal is in the right direction, but the requirements of other important provinces have been left out. Take, for instance, Ajmer-Merwara and Rajputana, Central Provinces, etc. At Ajmer we have two very large railway workshops equipped with extensive machinery, where Locomotive Engines and rolling-stock are entirely constructed out of raw material. These workshops should certainly be utilised, as a technical school established at Ajmer would serve not only this industrial Province but would also be extremely useful to the subjects of the surrounding Indian States like Jaipur, Jodhpur, Bikaner, Udaipur, Indore, Gwalior, etc. These States will, it is hoped, gladly join a scheme for the establishment of a technical school or an Institution for higher technology at Ajmer.

The Commissioners noted that in the Engineering Colleges at Roorkee, Madras, Sibpur and Poona—

"Increasing attention has in recent years been paid to the provision of instruction in mechanical and electrical engineering, but the measures adopted are inadequate and are conceived on altogether narrow lines to meet the needs, present and prospective, of a rapidly expanding industrial system. Indian Civil Engineers have done well in the Public Works Department and have established their claims to promotion to the highest

rank of the service; but in mechanical engineering, which, outside the railway workshops, is mainly carried on by private enterprise, we find that in the absence of a proper system of training, they have seldom attained to positions of importance or responsibility. In practically all the Engineering workshops, which we have visited, we found the same state of affairs existing with regard to the superior staff as we had seen in the case of Foremen. The former whether assistants or managers were men who had been trained as mechanical engineers in Great Britain," (page 150).

This state of affairs cannot be satisfactory and the Commissioners stated that—

"The experience of the war itself has been responsible for a new attitude on the part both of Government and of leading industrialists. They realise that it is necessary to create in India the manufactures that are indispensable for industrial self-sufficiency and for national defence, and that it is no longer possible to rely on free importation of essential articles in time of war. * * * "

"Finally the attention of the educated public and in particular of the large industrial employers has been drawn to the inconveniences and dangers that arise from the entire dependence of India on imported personnel for the supervision of Engineering industries." (Page 122).

We particularly draw attention to these observations of the Commission. All those who have a stake in India should not, even for a day, allow these conditions to continue. Will the Government be pleased to make a public statement of the action they have taken to carry out the recommendations of the two Commissions, with regard to the training of mechanics and mechanical Engineers in the Railway Workshops? To say the least the indifference of the Bureaucracy, in the past, towards the interests of Indians, has kept this country so backward. It is high time now that immediate action should be taken in this matter.

The Commissioners recommended the adoption of the fundamental principles drawn up by the Council of the Institution of Civil Engineers for the United Kingdom. They are noted below :—

"(1) That the average boy should leave school when he is about 17 years of age; that much depends upon the development of individual boys, but the minimum age should be 16 and the maximum 18 years.

(2) That the practical training should be divided into two parts and that the preliminary stage of practical training should consist in all cases of at least a year spent in mechanical engineering workshops.

(3) That during workshop training, boys should keep regular working hours and should be treated as ordinary apprentices, be subject to discipline and be paid wages.

(4) That nothing should be done in the form of evening study which would impose unnecessary strain upon the boys.

(5) That as a rule, it is preferable to proceed to a technical college on the completion of the introductory workshop course; but that, in the case of boys intended to become mechanical engineers, it may be advantageous to complete the practical training before entering the college; but in such cases it becomes important that simultaneous education during practical training should be secured. Otherwise, the boys would lose seriously during four or five years' suspension of systematic study, and would be at a disadvantage on entering the college.

(6) That for the average student, the period of college study should be at least three years.

(7) That at least three to four years should be spent in practical training inclusive of the introductory workshop course previously mentioned."

They noted that the age of students when they join an Engineering College in India is from two to three years higher than that recommended. Indian boys are at a disadvantage inasmuch as they have to spend several years in acquiring a knowledge of the English language. Until text books in the vernacular are provided, Indians should acquire sufficient knowledge of English to understand technical books at the age of 16 or 17 years. The matriculation standard with special coaching in mechanical terms and expressions should do.

In order to compete with boys of other nations, Indians should have the instruction in their mother tongue. This emphasizes the need for national education in the vernacular and the production of necessary text books in the vernaculars of India, for that is the only way by which Indians can keep pace with the boys of other countries. Until this is done, they must bear the extra strain caused by the study of the English language, which alone gives them access to the higher technical knowledge at present.

The Commissioners recorded there was a very decided consensus of opinion among practical men that—

"The ideal method of training Mechanical Engineers is to combine workshop practice and technical instruction as closely as possible. To attain this end in India, the workshop has been imported into the college, but the results have not been altogether satisfactory. The atmosphere of the workshop cannot be obtained in the school, and the importance of this is so great that we are convinced that mechanical engineers must be trained in the workshops, receiving supplementary class instruction in technical schools alongside, which should of course be of a more advanced nature than that which would be provided for foremen." (Para. 158, page 124)

We fully approve of these remarks and recommendations. We need such a school at every town or city where large workshops are established. These are at the following centres already:—

1. Lilloah (Calcutta)	...	...	...	} E. I. Railway.
2. Jamalpur	...	...	...
3. Kanchrapara	...	...	...
4. Parel (Bombay)...	...	B. B. & C. I.	G. I. P. Rys.	
5. Hubli	...	...	...	M. & S. M. Ry.
6. Perambur (Madras)	...	...	...	M. & S. M. Ry.
7. Negapatam	...	...	...	S. I. Railway.
8. Lucknow	...	...	...	O. & R. Ry.
9. Gorakhpur	...	...	...	B. & N. W. Ry.
10. Bareilly	...	...	...	R. & K. Ry.
11. Jhansi	...	...	...	G. I. P. Ry.
12. Lahore	...	...	...	N.-W. Railway.
13. Ajmer	...	...	...	R. M. Ry.
14. Jodhpur	...	...	...	J. B. Ry.
15. Khargpur	...	...	...	B. N. Ry.
16. Secunderabad	...	...	...	N.-G. S. Ry.
17. Bhavnagar	...	...	...	B. G. Ry.
18. Pahartali	...	...	...	A. B. Ry.
19. Insein	...	...	...	Burma Ry.

Smaller workshops are at many other places, some of which may suit the purpose of training apprentices.

The recommendations of the Industrial Commission are summarised as follows at pages 276-77 of their Report :—

"(34) Training for manipulative industries which include mechanical engineering should be given in the works themselves to which theoretical classes should be attached."

"(36) The training for mechanical engineering as an example of a manipulative industry is discussed above in detail."

"(37) At the large engineering shops practical training should be given to artisan apprentices on an organised system, with teaching in shop hours and the apprentices should be paid wages, a part of which they might receive in the form of deferred pay on leaving."

"(38) In the case of foremen, a system of apprenticeship, on conditions that shall attract middle-class Indian youths, is suggested with teaching in shop hours, of a more advanced type than in the case of artisan apprentices; and providing for boys who would start at somewhat higher age."

"(39) In the case of mechanical engineers also, the large engineering shops should be used as the practical training ground; but a greater proportion of the time should be devoted to the theoretical teaching of a higher kind than is necessary for foremen. Those students who desire it, may, after completing their shop training, take courses in special subjects at an Engineering College."

"(43) It is recommended that the engineering classes in the Victoria Jubilee Technical Institute, Bombay, should be adapted to meet the requirements of the apprentices in the railway and other workshops in Bombay and that the courses in the technology should be supplemented by two years' practical work before the full diploma can be gained."

In this connection I would draw attention also to the recommendations of the Public Services Commission of 1912 as contained in para. 32, pages 22-23 and in paras. 5 and 9, pages 338-40 of their Report, Volume I. The Commissioners in that Report also recorded their opinion in emphatic terms that the conditions which necessitated the importing of officers for the superior grades of the Loco. and Carriage and Wagon Departments of Indian State Railways from England "should not be allowed indefinitely to continue" and that a determined and immediate effort should be made to provide better educational opportunities in India, so that it may become increasingly possible to recruit

in that country (India) the staff needed to meet all normal requirements."

The central workshops of the large railways in India have already technical schools and drawing classes attached to them. All that seems necessary is—

(i) To throw them open to Indians as most of them are at present reserved for European or Anglo-Indian apprentices;

(ii) To widen and enlarge the courses of instruction so as to provide for the superior grades as well as for the subordinate apprentices of the technical branches of railway services and industrial requirements generally.

It is recognised that the cost of training apprentices other than those required for railway work should not be borne by railways. The Industrial Commission noted that "the precise allotment, between the Government and the Railways, of the extra expenditure entailed, will require further consideration." (Page 120).

It is hoped that the Government of India will be pleased, as announced by H. E. the Viceroy, at the Convocation of the Calcutta University, in December 1918, to pass early orders adopting the recommendations of the Industrial Commission, with the few modifications suggested herein, namely that the stipends and board allowances of apprentices should be fixed on a uniform scale without regard to creed, caste or colour, and that Indians may be admitted to the Railway Technical schools in due proportions. This will no doubt attract a large number of educated Indians who are at present driven to the clerical work or to join the legal or other professions, which are over-crowded. I particularly draw the attention of educated Indians to this matter of vital importance to the country. It is hoped the authorities of Ajmer-Merwara and the Ruling Princes of Rajputana will see that a suitable Institution of Technology is established at Ajmer in connection with the State Railway workshops there.

SECTION 8.—Need for Reorganisation.

The organisation of Departments on the Indian Railways is as good as may be desired. Reforms are however necessary in the system of working in the offices and also on the line.

These reforms are especially required to stop the duplication of work which is being done over and over again under the present system, and in some cases it has to be done in order to check errors made in the first instances.

Duplication of work may arise in three ways, *viz* :—

- (1) Through successive grades of authority, when a question, before it can be decided, has to pass through several hands or offices having different grades of authority, so that the lower offices merely express their opinion, while the highest decides ;
- (2) Within offices of the same status, if one and the same matter has to be dealt with by several authorities of equal grade ; for example, when the same material like coal, rails, etc., are ordered by several managements, or locomotives and rolling-stock are constructed by several managements, etc ;
- (3) Inside one and the same place of management, if the individual offices become so complicated that too many officials are required to settle one given matter, when Assistant officials, Chief Clerks, Referendaries, Heads of divisions, and Registry officials all have their say.

The settlement of a business matter as a rule becomes the more and more complex and costly, the larger is the body which has to settle it. Let us just examine the procedure generally followed in railway offices in India. Letters are usually received by an Assistant or the Chief Clerk, who sends them to the Registering Clerk, who abstracts the contents. Then it goes to the Sectional head, from him to the Reference Clerk, and from him back to the Head of the Section. Every one of them reads it but only the last one sits to work on it, he writes a note or prepares the

draft and sends the case to the Assistant, who reads it and initials the draft. In some cases he passes it on to the next senior officer, who also reads, signs and passes on to the Head of the Department. The last one gives the final approval and the draft is returned through the same channel to the Head of the Section, who sends it to the Copyist for fair copy. The fair copy is checked by the Head of the Section and initialled and passed on to the Head of the Department, through the same channel for signature and return. The case is finally sent to the Despatcher, who numbers the letter and despatches it to the addressee, sending the case to the Issue Registering Clerk, who abstracts its contents in the Issue Register and sends the case to the Record-keeper. Office messengers carry the file, on the long journeys they have to make in the administrative offices, until the matter is settled.

This procedure causes serious delays in answering references. Simple matters which should be answered in a few minutes, take weeks and months. The procedure has made the officials utterly indifferent, they hardly seem to realize the importance of a prompt reply. In Europe one generally receives the reply within 6 or 24 hours of enquiry; in no case are ordinary references held over for routine work as in India. The present system is an evidence of the inefficiency of the Indian Administration. Such a dilatory system will not survive in a hard competition. Promptitude, with accuracy goes largely towards efficiency, and accuracy in trying moments depends upon a systematic training and practice, which also create the initiatory power—*अवसान Ausán as Bīrbal* styled it.

In order to deal with minor and simple matters, there must be simple procedure, for it is just the minor transactions which are so numerous in a busy railway system. If in these cases there is duplication, the amount of work becomes overwhelming, and to avoid this it is desirable to entrust the disposal of such matters to competent officials working independently on their own authority as suggested hereinafter.

Let us take the Secretariat system of Indian railways. Mr. Thomas Robertson described it in the following terms:—

“ 51. There is an Assistant Secretary, an Under Secretary, and a Deputy Secretary for each section of the office, besides the Office Superintendent and clerks. Over all these are the Secretary and the Honourable Member in charge of the Public Works Portfolio. All cases pass through the hands of, and are usually noted upon by, all the officers of the section to which they relate, and are often passed on to the Secretary and the Honourable Member through the other sections, not infrequently six and sometimes eight and ten officers noting in the Railway Department alone on cases. If the case requires the sanction of the Finance Department, it is further noted upon in that Department by two or more officers. If there is any difference of opinion between the Railway and the Finance Departments, it is again noted upon by both Departments. Finally it may require to be laid before His Excellency the Viceroy. When the orders which are to issue have been agreed upon, the draft goes through the same process, in many cases all the officers who previously saw the case requiring to see and approve the draft. The examination of a question in this exhaustive manner, before passing orders on it, may prevent mistakes which it is very undesirable that the Supreme Government should make, but it should be possible to arrive at the same results without this cumbersome machinery, which is apt to impair the sense of responsibility, check progress, and delay business to an extent which would be fatal to any other commercial enterprise.”

When an accident occurs on a line, whether it is a serious or a minor occurrence of no consequence, it is reported by the nearest Station Master, the Driver and the Guard of the train, the Permanent-way Inspector, and the Carriage Examiner. In some cases the former make telegraphic reports, which are followed by fuller details by letter, addressed to the District Officer of each of the four Departments. The latter send them on with supplementary particulars to the Heads of their own

Departments, who in turn pass the reports, either in original or by copies, on to the Agent. This procedure may have been necessary in the early periods of Indian railways, when the staff were not trained to report the occurrences accurately. Now they are well acquainted with the procedure, it is not necessary to require reports from twelve persons or offices. With well thought-out regulations, one report by letter ought to suffice, besides the telegraphic advice in serious cases. On some railways weekly returns of accidents are compiled by each of the Departments, for submission to the Agent, who compiles a quarterly Return for the Government.

For want of a systematic training of Goods Clerks and Booking Clerks employed at stations, mistakes often occur in the charges made on Receipt Notes, Invoices, Way Bills, etc., necessitating the employment of a large staff of clerks in the Audit offices and in the Claims Section of the Traffic Superintendents' offices, and large correspondence follows with traders and others. If accurate charges be made in the first instances, there would be no need for the multiplication of this work, and the public would be saved all the trouble, annoyance, and avoidable expense incurred in connection with the thousands of claims for undercharges and overcharges on account of railway freights. Most of this work can be avoided by a simplification of the Tariffs as suggested in Chapter VII.

The multiplication of work involved in these and other similar cases, can be avoided with a regular system of work and a proper economic organisation of the service. Doing work twice, thrice, or four times over costs extra money; it delays and obstructs the transaction of business. The division of work among many offices and workers also injuriously affects the quality of the work done. As the old proverb has it: too many cooks spoil the broth.

Efficiency of the staff can be raised only by a systematic training for the different kinds of railway work, which is peculiar by itself, but the bureaucrat, who likes to keep the work in his own

grasp, will not allow such training. To find a concrete case, we have only to refer to paras. 64538 and 64631 of the Evidence in Volume XIV of the Report of the Public Services Commission, where two of the European officials of the Indian Finance Department blocked an excellent proposal for the establishment of a Training College in India.

For the training of men for the different branches of the Railway Service, the establishment of the following Institutions is very necessary:—

1. A Railway School at each railway centre for the training of clerks for offices and men employed at stations, *vi z*—

Station Masters and Guards,
Goods Clerks,
Coaching Clerks,
Signallers,
Others.

2. A Technical School and Drawing class attached to Central Workshops of Loco. and C. & W. Departments for the training of Drivers, Firemen, mechanics and subordinates of the Locomotive, C. & W., and Engineering Departments, as recommended in paras. 149, 152, and 372, and items 37—38, page 277 of the Report of the Indian Industrial Commission 1916-18.

3. A Central College for the training of officers for the superior grades of the Traffic, Accounts and Stores Departments.

4. A central Institute of Technology for Mechanical and Electrical Engineers, attached to Railway Workshops, with arrangements for the theoretical teaching of a higher kind than that for mechanics and foremen, *vide* para. 158 and clause (39), page 277 of the Report of the Industrial Commission.

As regards the proposed College for the superior grades of Accounts, Traffic and Stores Departments, it is necessary to state that the practical training at present given to the probationers in the actual work they will be required to supervise and direct, is no doubt very useful, but, if they go through a course of lectures on Indian Economics and Finance, Transportation and Rate-making,

Commercial Law and Book-keeping, Railway Statistics, etc., they will acquire a solid knowledge of the principles on which the work is based and carried out. A thorough knowledge of these broad features is very necessary, in order to attain the efficiency we have in view. See entries Nos. 64,446 and 64,562 in Vol. XIV of Report of the Public Services Commission 1916. It is on these grounds that the London School of Economics has been established and is largely attended by Railwaymen in England. Japan, a small country, has a Central Institute and five District Institutes for the training of railway servants. With the large system of railways in India, Railway Schools and Colleges as described above are absolutely necessary.

Königliche Verkehrs und Baueuseum (The Royal Traffic and Transportation Museum) in Berlin, Germany, is an ideal Institution for Traffic officers and Mechanical Engineers.

The system of work at present in vogue in railway offices in India requires radical changes. No improvement is possible without first class office men, who should be thoroughly trained for the work and could be relied upon. Few but all able and well paid (not over-paid) officials that must be the principle in organizing the staff. For the economical working of a Head Office of a Railway, like that of the Agent or the Traffic Manager, three or at most four grades of officials should suffice.

The out-door work should be looked after by the Heads of Departments and the District officers. The former should also deal with certain cases of importance and principle. The powers of the District officers should be defined, beyond which they must refer to the Head Office.

The routine work under the rules, regulations and precedents may be left to the officials at the Central Office of the respective Departments. Where necessary these officials may be allowed to go out on the line and settle the matter personally, to save correspondence. The working regulations should regulate the written correspondence. The official dealing with a matter should write out the fair copy himself. In the Bavarian Ministry only 33 per cent. of all communications were copied; at the Directorates

and the Central Offices, this proportion was much smaller, while the Inspectorates had no staff of clerks.

The labour spent on Daily Registers of Inward and Outward Letters is a mere waste. This work should be done away with, and a register of cases only should be kept, each case being serially numbered and distinguished by mnemonic principles. Thus for instance T.= Traffic, and W.= Working, T. W.= Traffic Working, etc. And each letter attached to the case should be serially numbered or paged as may be convenient.

The clerks relieved of the registering work may be employed on other useful work.

Another saving of labour may be effected by discontinuing the system of writing office notes and drafts. The official in charge of the Section should write out the fair letter himself, keeping an accurate note of the reply on the office file, or may use, where possible, printed forms of typical replies.

Thus the system of case registry on the one hand, and of not writing office notes and drafts but writing the fair copy at once, makes it possible to combine the functions of Assistant, Registrar, Copyist and Record-keeper in one and the same person. Where under the present system three or four employees are necessary, only one will be required under the system herein proposed.

Well thought-out rules and regulations should be laid down for dealing with various kinds of questions, and the subjects to be dealt with by each Section of office should be carefully classified. The work of each Section may be divided in three grades according to the grades of the officials employed. Each of the officials should be vested with competence to deal independently with matters entrusted to his grade, without reference to the higher officials.

Certain questions may concern more than one section. Such matters should be disposed of by personal consultation between those concerned. No written notes should be exchanged in the same office or building or in the same station. The exchange of written notes in such cases should be prohibited. Where

necessary each official should be provided with a telephone to settle such matters by personal conversation. In a section, where work may be too much for one man, a sub-division of such work may be made between two or more officials, but each of them should work independently, in some cases in consultation with each other.

The powers of officials of the varying grades should be clearly defined, so that each of them may act independently in matters falling within his powers. One of the most difficult and responsible duties of the organizer, when adjusting powers of the different posts, is to fix the proper mean between centralization and decentralization in the case of lower posts, between giving them a free hand and, on the other hand, strictly controlling their work and economy by the higher posts. A higher official, as he has a more general view, is in a better position to supervise the economy of the whole undertaking and the proper working of its different parts. But that very reason tends to make him over-estimate the importance of his work and to look after the lower offices too much. Even the best division of powers is not always able to prevent this; it is, therefore, necessary to have a careful supervision of the whole administration and last, but not least, a corresponding distribution of the staff. This forms a very simple but effective means for the proper observance of the different fields of competency. It is only necessary to have as small a staff as possible in the higher posts; then those officials will, of themselves, refrain from interfering with the competencies of the lower posts more than is absolutely necessary.

Although the head of an office is responsible for the duties which it carries out, yet individual officials working under him should be given extensive powers to sign papers on their own authority. Only important documents need be signed by the head himself.

To keep down records all papers of a temporary nature should be kept separate from important ones, and destroyed or put away periodically, while papers containing rulings or important

documents alone should be on permanent files. This will greatly facilitate work.

According to the reorganisation introduced on the Bavarian railways in 1907, only three grades of officials were employed in the administrative offices. Their salaries compared as follows with the previous period 1905:—

1905.		1907.	
	Marks.		Marks.
700 at 5,200 Marks per annum ...	3,640,000	400 at 6,000 Marks.	2,400,000
6,000 at 2,300 „ „ ...	13,800,000	3,000 at 3,400 „	10,200,000
3,000 at 1,400 „ „ ...	4,200,000	4,400 at 2,400 „	10,560,000
9,700 at 2,230 Marks = £111-10s } Total.	21,640,000 = £1,082,000	7,800 at 2,970 = £148-10s	23,260,000 = £1,163,000

The average receipts from goods traffic per ton mile on the Bavarian Railways were 0·71*d.* about 9 pies. The number of Officials employed in the administrative offices in 1910 per 100,000 Marks of gross receipts was 1·16, at a cost of 3,986 Marks. A Mark was equal to a shilling or 12 annas in that year.

The organisation of staff must be carefully regulated by fixing suitable rates between the numbers of posts for promotion which are available for the staff in the different branches, and by regulating the admission accordingly. In determining the rates, the tables of mortality and of activity should be used. If, for instance, the higher official is to attain the position of the head of a District office, 8 to 10 years after entering the service, then the number of officials in the beginners' posts must be only a little more than one-third of the number of higher posts. If more than this number of subordinates are required, it is necessary to take officials from the next lower grade.

On the actual number of posts, the necessary percentage should be added for leave admissible under the rules, and the annual recruitment based on observed rate of decrement over a period of 50 years or less, according to the actuarial data available. The percentage for different services in India varied from

3.82 to 5.02.* In so far as a service is large enough and old enough to have a reliable rate of decrement, it is important that this should be followed, in fixing the annual rate of recruitment.

SECTION 9.—Inequalities and their cure.

In section 6, we have already shown the disadvantages from which Indians suffer in the matter of employment on the Indian railways. The treatment of Indian passengers and Indian public is hardly any better. The Waiting Halls, used exclusively by 3rd class Indians, are far from comfortable; while on some railways 1st & 2nd class Waiting Rooms were provided on racial distinctions. Some railways reserved a 3rd class compartment for Europeans, in which sometimes a single person travelled alone, while compartments accupied by Indians were crowded.

Indians felt these discriminations, which are unjust and especially so, as they are made with Indian money. The discriminations are made on every occasion: in the restrictions made in 1919 in the bookings by passenger trains, on account of the war, articles of European requirements, such as Oilman-stores, whiskies, wines, beer, fish, *butter* were allowed; while articles of Indian consumption, like *ghi*, grain, sugar, were disallowed.

In March 1918, the Hon'ble Rai Bahadur Bishnu Dutt Shukul asked in the Viceregal Council.†

(a) "Is it a fact that there is a difference in the scale of salaries of Indian and European Station Masters who are working in Mesopotamia as hereunder :—

		1st grade.	2nd grade.	3rd grade.	4th grade.
Indians.	Rs.	135	99	99	99
Europeans.	"	400	376	348	324

(b) If so, will Government arrange to remove this inequality of treatment?"

The Hon'ble Sir Robert Gillan replied.—

* Para. 63, page 44 of Vol. I of Report of the Public Services. Commission 1916.

† Page 138 of the Gazette of India Part VI, March 9th 1918.

"The pay of Indian Station Masters serving with the Military Railway Administration in Mesopotamia is now Rs. 150; they were recruited for employment at small stations and were taken from the lower grades in India for this purpose. The European Station Masters, who are paid Rs. 348 to Rs. 400, were recruited for employment at large and important stations. As the duties are not comparable, there is no inequality of treatment."

The wording of this answer is capable of various constructions, but one cannot help asking why Indians were not recruited for employment at large and important stations? It is not that they are incapable of holding charge of such stations, but it was a racial discrimination pure and simple, as is evident from the ruling of the Open Line Code already quoted at page 163.

For abilities of Indians in the matter of managing large railway stations, we would mention the case of the Sabarmati Junction of the Rajputana-Malwa and the B. B. & C. I. Rys. On opening of the line through to Bombay from 1881, the working of that Junction was in charge of the B. B. & C. I. Railway, who employed an Assistant Traffic Superintendent in charge of the Junction. At that time Sabarmati was the largest tranship station in India and in the world, where as many as twenty-four train-loads of goods used to be transhipped from the Metre-gauge to the Broad-gauge, every 24 hours during the busy season in April, May and June. The working of the Tranship yard completely failed under the European Superintendent and the Sabarmati yard was blocked, when the B. B. & C. I. Ry. Company was obliged to make over the working of the Tranship station to the State Railway Administration in 1882 or 1883. Pandit Mulk Raj, Chief Goods Clerk of Ajmer Station, was selected for that most difficult post. Pandit Mulk Raj managed the tranship-yard so well that he was decorated with the title of Rai Saheb for his exceptional ability in expeditiously conducting the tranship-work under trying conditions. Most of the work on Indian railways is executed by Indians but owing

to the colour-bar Indians have been kept down in the lower grades. Although Indians do most of the work, the credit goes to the few Europeans who fill the top-places in the Service. It is this injustice which is keenly felt by every one of the Indians employed on the railways in India. If Rai Saheb Mulk Raj were an Englishman, he would have been at once promoted to the Superior grades and might have eventually risen to the highest post on the Railway, but as an Indian he was pacified with the mere decoration of a Rai Saheb and kept for the whole of his life to the post of the Station Master at Sabarmati. In America, even in England, the top-places on the railways are often held by men, who shine out in the lower ranks, but there are thousands of Indians, who daily render highly meritorious services on the Indian Railways and other branches of Government Administration; hardly one of them ever receives due recognition, none has so far risen to the top-posts on the Railways. They are not even encouraged to aspire for such offices. Their spirit was killed; but thanks to the national consciousness aroused during the events of the late European War. Indians now realize that they have equal rights and privileges along with people of other nations.

We have written these lines reluctantly, but it is far from our desire to cast reflections against any community. We know that among the Englishmen there are many who dislike these discriminations and would stop them if they could; but it is the system of administration which has created these objectionable features, and by showing these discriminations we desire to bring about the necessary reform. It is the duty of all lovers of justice and fair-play to combine and have the injustices removed from wherever they may be found to exist. We trust the Constitutional Reforms which have been inaugurated in India from 1921, will effectually remove all racial discriminations. We look forward to the day when Indians, Europeans, Anglo-Indians and all others residing in India will meet and embrace each other as fellow-beings and citizens of the Common-wealth.

In the Budget debate in the Legislative Assembly on the

16th March 1921, Sir George Barnes said that the inequality of treatment between Indian and European passengers was mainly done by Indian Station Masters, and not by European Station Masters. In view of the facts given here, we trust the Hon'ble Member for Commerce and Industry will modify his view and have the discriminations removed from all rules and regulations now in force, and see that equality is practiced by Englishmen.

Labour organisation:—The League of Nations realize that “Conditions of labour exist involving such injustice, hardship and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperilled.”

Moved by sentiments of justice and humanity, as well as by desire to secure the permanent peace of the world, the High Contracting Parties have laid down an organisation of Labour in Part XIII of the Versailles Covenant, and we give here main points of that organisation.

The permanent organisation consists of—

- (1) a General Conference of Representatives of the members, and
- (2) An International Labour Office (Art 388).

The meetings of (1) are to be held at least once in every year. Each nation can send 4 delegates, *viz* :—two representatives of Government, one of employers and one of employees. Each delegate may have two Advisers for each item on the agenda. The members have undertaken to nominate non-Government Delegates and Advisers chosen in agreement with the industrial organisation (Art 389).

If one of the members fails to nominate one of the non-Government Delegates, the other non-Government Delegate shall be allowed to sit and speak but not to vote (390).

The Governing Body of the International Labour Office shall be constituted of—

- | | | | | |
|----|---------|--------------|-----|-------------------------|
| 12 | persons | representing | the | Governments, |
| 6 | „ | elected | by | Delegates of employers, |
| 6 | „ | „ | „ | of workers. |

One of these shall be elected as Chairman. The period of membership will be three years (393).

The Governing Body shall appoint a Director of the International Labour Office (394).

Each of the members (nations) will pay the travelling and subsistence expenses of its Delegates and their Advisers and of its Representatives attending the meetings of the Conference or the Governing Body. All other expenses of the International Labour Office and of the meetings shall be paid by the League of Nations out of its general funds (399).

The High Contracting Parties, recognising that the well-being physical, moral and intellectual, of industrial wage-earners is of supreme international importance, have framed, in order to further this great end, the permanent machinery and associated it with that of the League of Nations. Among the methods and principles for regulating labour conditions, which all industrial communities should endeavour to apply, the following seemed to the High Contracting Parties to be of special and urgent importance :—

First.—The guiding principle that labour should not be regarded merely as a commodity or article of commerce.

Second.—The right of association for all lawful purposes by the employed as well as by the employers.

Third.—The payment to the employed of a wage adequate to maintain a reasonable standard of life as this is understood in their time and country.

Fourth.—The adoption of an eight hours day or a forty-eight hours week as the standard to be aimed at where it has not already been attained.

Fifth.—The adoption of a weekly rest of at least 24 hours, which should include Sunday wherever practicable.

Sixth.—The abolition of child labour and the imposition of such limitations on the labour of young persons as shall permit the continuation of their education and assure their proper physical development.

Seventh.—The principle that men and women should receive equal remuneration for work of equal value.

Eighth.—The standard set by law in each country with respect to the conditions of labour should have due regard to the equitable economic treatment of all workers lawfully resident therein.

Ninth.—Each State should make provision for a system of inspection in which women should take part, in order to ensure the enforcement of the laws and regulations for the protection of the employed.

Without claiming that these methods and principles are either complete or final, the High Contracting Parties were of opinion that they were well-fitted to guide the policy of the League of Nations; and that, if adopted by the industrial communities who are members of the League, and safe-guarded in practice by an adequate system of such inspection, they would confer lasting benefits upon the wage-earners of the world (article 427).

Under the foregoing article the right of association for all lawful purposes by the employed as well as by the employer has been conceded. A proper organisation of the Railwaymen in India is absolutely necessary. For want of an organisation of Labour, the Franchise Committee had to provide by nomination for the representation of Labour in the Legislative Councils of Bombay, Bengal, Bihar and Orissa, and Assam. If the workers had their organisation, it would have been included as a constituency among the electorates. The absence of labour representation was noticed in the Joint Committee of Parliament who, in para. 7 (a) of their Report, desired that an attempt should be made to secure better representation of urban wage-earning class. (*Vide* speeches of Mr. Adamson and Sir J. D. Rees in the House of Commons on the 5th December 1919 when the Government of India Act was being enacted.)

The Parliament desires the workers to have a regular organisation. It remains only for the men to bring about the organi-

sation, so that they may secure direct representation in the new Councils, and be able to secure their dues by joint action. As they only desire equal justice and equal opportunities to all Railwaymen alike, it is hoped that all those who love justice will join this organisation.

The European officials of Indian Railways are however, opposed to the men forming their Unions. In an informal address which Sir Thomas Holland made to the Indian Railway Conference Association in October 1920, he advised the Railway Administrations to take every possible step to remove the suspicion that individuals would be victimized if they took part in representing their grievances or in movements that might lead to a strike. There is a good deal of fear among the railwaymen in this matter, and the higher officials only discourage the men from forming their Unions. Some of the Railways have organised Works Committees, composed of representatives of the supervising staff and of the different classes of workers, as suggested by the Whitley Commission in England. We doubt these Committees will serve the purpose of independent Unions of railwaymen.

The problem of the world is rather difficult. The Capitalists want the lion's share for themselves. Labour wants better wages and shorter hours of work; while the public want reduced prices and cheap living. How are all these conflicting wants to be met? It is difficult to satisfy all, unless some new methods are adopted. The prevailing methods have shown their hollowness. The materialistic culture has failed. There is no hope of real relief from materialistic lines. To solve this great problem, we must seek the aid of the Eastern sages. We must build our future plans on the bed-rock of spiritual truths—truths of equality and fraternity. We must realize the principle of Universal Brotherhood, not only in name but in actual practice. We should treat our fellow-workers exactly as we treat ourselves.

Most of the troubles are due to capitalism. If we cannot altogether stop it, if we cannot fully adopt the Mohammedan law of treating interest on capital as unlawful, we should at least stop

for the future those practices which lead to accumulation of wealth with classes and poverty of the masses.

In all seriousness, I ask the higher officials of India, whether they actually need their monthly salaries in four figures, while the vast majority of the people live upon monthly incomes in single figures only. Where do the disproportionately high salaries come from? Only out of the shares due to rest of the people, who must be getting so much less than their due. This is a wrong which reasonable people will admit. Indian sages have refused to take any thing beyond their bare needs.

Why should this wrong be continued? It is not for the ultimate good of the nation, nor even for the real good of individuals, who, forgetful of the essentials of life, go on amassing wealth. For their own requirements, they do not need it. The greater portion of it they spend on luxuries, the rest they keep in Bank or in securities, which do not go with them after death. The wealth remains behind and goes to their sons or other relations, who seldom thrive or prosper with it, for unearned wealth has generally demoralizing effects. The law of *Karma* has its effects and our Conscience—Chitragupta—the Instantaneous Photographer of our mental thoughts, never spares us.

After all material-wealth does not much help man. It does not give true happiness. It does not satisfy the cravings of the heart. The more one gets, the more one's desires increase, inflame and multiply. One seldom gets peace or contentment from worldly possessions.

They are temporary, meant only to satisfy certain wants of the physical body. Beyond that, they serve no useful purpose. The habit of accumulating them or longing for them is a vanity. Those desirous of helping the world in the solution of the great problem now facing every nation, should check this vanity and adopt moderate means of life, based upon justice, humanity and fraternity.

Justice requires that workers should receive better treatment, and those who have more than they require for their needs,

should use such surpluses for the benefit of their helpless neighbours. Capitalists and those in authority should curtail their takings—direct or indirect. In Section 6 of this Chapter, we have already shown the high proportion of salaries drawn by the higher officials of Indian railways. That is very unfair and should not be allowed to continue.

I do not grudge to allow the capitalists a reasonable return on their capital, though a critical time may require a sacrifice of even such return in the interests of the nation. Examples of such sacrifices are not wanting in the social life of India. But the time for such an adjustment has not yet come; it may come if necessary remedies are not applied in time.

But the great mischief lies in the unduly large proportion of the national income, which men in power allot to themselves and to their colleagues. If they will not give up this high-handedness, the break-down of the whole machinery is inevitable.

The national demand for lowering prices of every day requirements must be met. It can be met by three ways: one by adopting economic appliances; secondly by reducing unnecessary expenses (including high salaries) which add to the costs of outturn; and thirdly by giving up vicious luxuries and adopting wholesome simple life.

If the people in authority would not help in adopting such remedies, the conflict between those that have and those that have not may crop up. Justice demands that the former should yield and evince love for humanity, for fellow-feeling and for self-preservation, for they cannot prosper for ever without the prosperity of their co-workers and fellow-beings. The sacrifice is necessary for their own good.

I would conclude this by repeating the following advice I gave in my Presidential Address to All-India Railwaymen assembled at their First Conference at Bombay on 4th February 1921:—

“In drawing your attention to some of the defects and disadvantages from which subordinate employees of Indian Railways at present suffer, I advise you to make your representations

in a reasonable spirit and to do your best to maintain harmonious relations with those under whom you are placed. I see no wrong in representing your wrongs. The wrongs must be righted and I trust the Railway Authorities will also be reasonable to give due consideration to the grievances of their subordinates and place the service on just and considerate grounds and have a sound organisation to have a staff of trained men for the various classes of duties required of Railwaymen. Such an arrangement I cannot but think will be satisfactory to all concerned—satisfactory to the men entrusted with the working of the railways, and satisfactory to the public and trade of the country for whom the railways are established. I would advise you to always be respectful to the authorities and settle your disputes amicably, as far as possible by negotiation and arbitration, without resorting to direct action. I would advise you, gentlemen, to fully appreciate all good points of the service. Mind, the railways are yours, you have a Sacred Trust in your hands and you must discharge that Trust in a Sacred manner. The country pays for the railway service and expects the service to be rendered in a satisfactory manner, without undue burden upon the people and without your being unreasonable to those, whom Providence has placed under or above you. To the higher officials I would say: Be reasonable in fixing your own emoluments and privileges, show the magnanimity of your heart by self-sacrifice and contentment by glory of the high office which Heaven has given you; curtail your personal wants and do justice to your subordinates."

Chapter III.—Old Guaranteed Railways.

SECTION 1.—Introduction of railway in India, and Contracts of Railway Companies.

Early in 1845 a formally drawn-up prospectus for a company was put before the Court of Directors of the East India Company, which proposed to raise a capital of one million sterling, for the construction of an experimental railway, starting from Calcutta, and extending for 140 miles towards Allahabad. The Company asked at the outset for a guarantee on its outlay of 3 per cent; but were willing, if this was considered objectionable, to be content with a bonus of 30,000*l* per annum, in order to encourage the introduction of railways into India, but with the proviso that this bonus should be withdrawn when the net profits of the railway exceeded 3 per cent. on the capital of one million.*

The Court of Directors decided to send out to India a railway engineer of experience who, after due enquiry, would suggest some scheme of moderate length as a first experiment. Mr. Simms was the gentleman who was sent out from England, and he arrived in India in September 1845. He drew up a memorandum, dated 6th February 1846, in which he made the following suggestions as to the terms which should be offered to English Capitalists. As to the assistance to be given by Government, he proposed that a lease should be given to a company affording it power to construct, maintain, and hold certain lines for a term of years, that land should be given by Government free of cost for permanent works; that no tax should be imposed on the railway as it proceeds; and that a company should have complete control over its servants. On the other hand, the Company should make the necessary surveys and plans and submit them for approval, should construct the lines in accordance with an approved specification, and maintain all works in perfect repair, until the

*Railway Policy in India by H. Bell, 1894, page 2.

expiration of the lease, when they should be handed over to Government *without payment*. No deviation from a sanctioned plan was to be made without further sanction of Government and the inspecting officer was to have power to condemn, stop, or order the construction of any work. If any company failed in the its engagements, the Government was to have power to take the whole property into its hands, and do with it as it thought fit. Further, he proposed that on the completion of any line, every working regulation, rule, or bye-law, the tariff for rates and fares for goods or passengers, the number of trains per diem, and times of starting of same should be approved, in short, every detail was to be submitted for the acceptance of the Government, and no line was to be opened for traffic until all proposed rules had been sanctioned. Moreover, every railway was to carry mails, troops, and military stores at reduced rates. The failure to run one train a day from end to end of a line was to be held to be evidence that the railway had ceased to be employed as such. All Indian railways were to be constructed on one specification, worked on one system, and supplied with stock of one uniform pattern; while every company was to keep its accounts in approved forms, and the Government to have power to call for any returns, financial or statistical, that might be thought necessary. Mr. Simms suggested that the Government might in addition, think it advisable to guarantee a small percentage upon the actual cost of the works, which guarantee should not operate until the railway was opened for traffic, and should cease if a line was not worked regularly or satisfactorily. In dealing with the suggestions made by Mr. Simms, the Government of India, then under Lord Hardinge, considered that the proposal to give land free of cost was right and proper, but that the power of government becoming eventually the proprietor of railways in India should be reserved on certain conditions at the expiration of a certain period. The grant of a guarantee of interest was considered impolitic.*

* Railway Policy in India by H. Bell, pages 5—7.

The Government of India in July 1846 recommended a grant of one million sterling, or an annual contribution of 5 lacs of rupees to a railway completed between Calcutta and Delhi. The Court of Directors dissented from the Government of India on the subject of guarantee, which they held to be essential to the formation of the company, and recommended 4 per cent., on all sums paid into the treasury on the condition that all profits should be divided between the Government and the Railway company. In December 1846 the Board of Control communicated its views to the Court of Directors. They accepted the proposal for constructing railways by means of companies, modified the terms for ultimate purchase, and objected strongly and entirely to the idea of a guarantee or at least until the Directors of the East India Company were fully satisfied that the money could not be raised without it, and then only for a period of 15 years. These terms were not acceptable to the promoters, but the Board of Control would not yield and a long period of delay intervened, during which the Chambers of Commerce of Manchester and Glasgow represented the need for encouraging the carrying out of railways in India, urging that a guarantee of a minimum rate of interest should be granted in the same way as had been given to companies for the construction of railways in various colonies of the Empire. After further discussion and a further representation in June 1847 from the Court of Directors, the Board of Control reluctantly consented, in view of the then condition of the money market,† to raising the rate of guaranteed interest from 4 to 5 per cent., and for a period of 25 years.‡ These terms were accepted by the Directors of the East Indian Railway with a grateful sense of the liberal manner in which they had been treated by the East India Company.§

† This point is not supported by opinions of experts recorded in Section 3 of this Chapter.

‡ Railway Policy in India by H. Bell, pages 8 to 10.

§ Pages 4–5 of History of the E. I. Railway by G. Huddleston, C.I.E.

Sir William Wilson Hurter has described Lord Dalhousie as the father alike of the Railway and of the Telegraph in India ¹.

As President of the Board of Trade in England, Lord Dalhousie found himself face to face with the railway mania in that country in 1845-46. He laid before the Prime Minister a scheme for treating the new system of communication in England as a national concern and for bringing it under a more direct and effective contract by the State. Lord Dalhousie's admirers claim for him that if his proposals had been accepted, England would have been spared the wide-spread ruin of the railway panic, which soon afterwards resulted from leaving the railway development to private competition. ²

Lord Dalhousie's scheme remained a proposal only, until it fell to his lot to carry it out himself in India, where he came out as Governor-General in January 1848.

In July 1850 Lord Dalhousie wrote an important minute relating to the Experimental railway from Calcutta towards Allahabad. The concluding paras. of that Minute are quoted below:—

" 43. I have entered on the questions connected with the commencement of the experimental railway in Bengal at some length because, although it is but a small beginning, and a doubtful one as yet, I nevertheless entertain a hope that in the years to come this great instrument of improvement may be extended over all the land, bringing with it the rich and numerous benefits it is calculated to produce. Looking far before us to this possibility, I am anxious that the Government of India should early take warning from the errors which we have all committed at home in legislating for the regulation of railway works, and that so it should profit by the experience which others have dearly brought.

44. I heartily trust that the East India Company and the Government of India may hold by the principle on which they have acted in the present case. I trust they will ever avoid the error of viewing railways merely as private undertakings, and will regard them as a national works, over which the Government may justly exercise and is called upon to

¹ Page 190 of "The Marquess of Dalhousie" in *Rulers of India Series*, 1895.

² Page 27 of *Ibid.*

exercise, a stringent and salutary control. This control should not be an arbitrary right of interference, but a regulated authority, defined and declared by law, which is not to be needlessly or vexatiously exacted, but which in my humble judgment is necessary at once for the interests of the State and for the protection of the public."*

In his Minute of 1853, Lord Dalhousie recommended that in the first instance, a system of trunk lines should be formed, connecting the interior of each Presidency with its principal port and the several Presidencies with each other. The trunk lines proposed were:—

A line from Calcutta to Lahore;

A line from Bombay to some point in Hindustán, or alternatively a line by the Narbada Valley to meet at some point the line from Calcutta to Lahore;

A line uniting Bombay and Madras; and a line from Madras to the Malabar coast.

The Court of Directors accepted the general plan proposed.†

The objects which in 1853 Lord Dalhousie had in view for the introduction of the railways in India may be noted as under:—

(1) To immensely increase the striking power of his military forces at every point of the Indian Empire,

(2) To bring British capital and enterprise to India.

(3) To secure commercial and social advantages to India which were "beyond all present calculation," especially mentioning the following:—

(a) To carry away the produce which great tracts in India were teeming with but could not dispose of;

(b) To increase the production of cotton which England was calling aloud for its Mills;

(c) To spread articles of European produce "in the most distant markets of India" and "beyond our present frontier";

* Page 12 of "Railway Policy in India" by Horace Bell 1894.

† Imperial Gazetteer of India Vol. III page 366, 1907.

‡ Dalhousie, Rulers of India Series by Sir W. W. Hunter pages 193-94.

- (d) To bring into the ports produce from the interior for ships which from every part of the world crowd our ports in search of produce.

How far these objects were for the benefit of India and for England and other countries of the world, may be gauged from the actual results that have followed, see Section 8 of Chapter I.

The following companies were constituted under Parliamentary Acts; the years in which their formal contracts were originally executed are given below:—

1. The East Indian Railway Company	...	...	1849
2. The Great Indian Peninsula Railway Company	...	...	1849
3. The Madras Railway Company	...	...	1852
4. The B. B. & C. I. Railway Company	...	...	1855
5. The Scinde, Punjab & Delhi Railway Company	...	...	1858
6. The Eastern Bengal Railway Company	...	...	1858
7. The Great Southern of India Railway Company	...	...	1858
8. The Calcutta & South Eastern Railway Company.	...	...	1859
9. The Indian Branch (Subsequently Oudh and Rohilkhand) Railway Company	...	...	1867
10. The Carnatic Railway Company (amalgamated with No. 7 on 1st July 1874)	...	...	1870

The Companies were formed to construct and work railways in the various parts of India.

Shortly after the East Indian Railway Company, another Company, known as the Great Western of Bengal Railway, was formed for the purpose of constructing a line from Calcutta to Rajmahal, to be carried over a portion of the projected main line of the E. I. Railway, and entering into competition with the branch to Rajmahal contemplated by the E. I. Railway. It was considered expedient to amalgamate the interests of the two Companies,* and this was done on terms which we have not been able to trace.

* Page 5 of the History of the E. I. Railway by C. Huddleston, C. I. E.

The main terms of the contracts of the Companies formed upto 1859 were as follows:—

1. That the Government was to provide land for all railway purposes free of charge for a term of 99 years.
2. That the Companies were to raise the Capital, upon which the Government of India guaranteed interest at 5 $\frac{1}{2}$ per cent., per annum to be paid in London.
3. That the Railway Companies were to pay the capital into the Government Treasury in London and partly in India, and the Government were to advance the money as required in England and India for purposes of the Railways, all sums of money paid or drawn by the Companies in India being set-off at the exchange of 1s. 10d. for each rupee.
4. That the affairs of the Railway Companies were to be under the general supervision and control of the Government.
5. That the net profits made by the Railways, after deducting the working expenses, were to be applied, in the first instance, towards the discharge of the guaranteed interest paid by the Government, the rupees so applied being reckoned at the fixed rate of exchange of 1s. 10d. each; any surplus profits, after meeting this interest, were entirely for the use and benefit of the shareholders of the Companies.
6. That the Government mails were to be carried free and the Government troops on duty at concession rates, viz.,
 - (a) Officers in 1st class at 2nd class fares.
 - (b) Troops and European artisans in 2nd class at the lowest fares.
 - (c) Others at the lowest fares.
 - (d) Stores and equipment at the lowest rate for the time being chargeable for the carriage of such animals, goods and merchandise.

† In some cases the rate was 4 $\frac{1}{2}$ and 4 $\frac{3}{4}$ per cent.

7. That the Railway companies would allow the use of the Railways to the public on such terms and at such rates and fares as were to be approved by the Government.

8. That at the end of the term of 99 years by effluxion of time, the Railway and immovable fixtures were to become the property of the Government free from all debts and charges whatever, save such as were sanctioned by the Government, and the Railway Companies were to sell to the Government, who were bound to purchase, all engines, Carriages and other movable stock, Machinery and plant of the Railways at a valuation to be made by referees.

9. After the first term of 25 years, or the second term of 50 years, the Government had the right of purchasing the railway upon paying the value of all shares or capital stock in the Company concerned, calculated according to the mean market value in London during the three years immediately preceding the date of purchase.

10. The Companies had also the right, after the Railway lines had been in work for three Calendar months at least, to surrender and relinquish the railways to the Government, who were in that case bound to pay to the Companies the Capital expended upon the Railways.

The form of these contracts was revised in 1866-67.* The main changes were that the rate of exchange was raised from 1s. 10d. to 2s. per rupee and that the surplus profits were to be worked out yearly instead of half-yearly as provided in the former contracts.

The terms of the contracts were further modified by the Secretary of State about the year 1870 without consulting the Government of India, and it was arranged that any excess profits over 5 per cent. were to be equally divided between the Government and the Companies, the Government at the same time having waived their right to the repayment (clause 5 above) out of the excess profits of the interest advanced to the Companies

* Paras. 10-16 of Sir Juland Danver's Report for the year 1866-67.

This arrangement was carried out with the G. I. P. Railway Company, the Madras Railway Company and the B. B. & C. I. Railway Company.

The total number of proprietors of the eight guaranteed Companies on the 31st of December 1879 was 63,290, of whom 59,385 were share-holders and 3,905 were the holders of Debenture Bonds and stocks. Of the share-holders, only 301 were registered in India, of whom 130 were Europeans and 171 Indians. Of the 59,084 share-holders registered in England, 24,874, owned stock or share to the amount of £1,000 or upwards, while 34,210 had stocks or shares of smaller amount than £1,000.† The largest number of proprietors in India was 762 in the year 1865, of whom 404 were Indians.

In 1879 an Act entitled the "Indian Guaranteed Railways Act, 1879" (42 & 43 Vict. Cap. 41) was passed to enable the Secretary of State and the Guaranteed Railway Companies to enter into working arrangements for various purposes, to enable the Companies to do certain acts, such as to maintain ferries, to take tolls for ordinary traffic over their bridges, etc., the legality of which was previously doubtful. Any legal impediment which formerly might have prevented a Guaranteed Company from entering into agreements to work railways other than those constructed by themselves was removed by this Act.

The terms and the working of these companies were found to be most unsatisfactory. The system of guaranteeing interest was generally condemned as early as the sixties of the last century. The Railway Companies, assured of a high rate of interest, out of the general revenues of India, had no incentive to economize either in the first cost of construction or in the maintenance and working expenses, unless the net earnings of the railway rose above the guaranteed interest, which did not occur owing to the undeveloped condition of the country and its trade and to the reluctance of the Railway Companies to reduce their

† Page 13. of Sir Juland. Danver's Report on Railways in India for 1879-80.

rates and fares sufficiently to attract traffic. This was actually the case until the State Railways were established since 1869 and took the lead in introducing low rates and fares. From the year 1877, the working of the guaranteed railways showed better results; still they showed losses to the State throughout the period of their existence, except during the year 1877-78 in which they made a profit. The net loss incurred by the Government of India on account of the old Guaranteed Railway Companies amounted to Rs. 58,07,24,409, the simple interest on which worked out to Rs. 90,22,79,455 upto 31st March 1917, as shown in appendices Nos. 2 and 3. Treating the outlay, however, as a commercial concern, compound interest is chargeable and we add it at the moderate rate of 4% per annum. The total loss to the State thus amounted to Rs. 3,19,95,39,690 upto 31st March 1918, *vide* appendix No. 3A.

In 1860-61 the Secretary of State for India, decided not to guarantee the capital of any new railway undertaking, and to confine the support and assistance of Government to the Companies with whom contracts were already made.*

As a result of the foregoing decision, attempts were made to establish unguaranteed Railway Companies, and two of them came forward, *viz.* —

- (1) The Indian Branch Railway Company, which constructed a line of 27 miles on 4 feet gauge from Nalhati to Murshidabad in December 1863, and another branch railway from Cawnpore to Lucknow started in 1864.
- (2) The Indian Tramway Company, which constructed a line of 18½ miles on 3'-6" gauge from Arkonam to Conjeeveram in 1864-66.

Both these Companies started without a Government guarantee. The aid given by the Government to these Companies was subsidy, the payment of which was contingent on the actual completion and maintenance of the lines. This kind of assistance

*Para. 6, page 8 of the Report on Railways in India for the year 1860-61 by J. L. Danvers, Esqr.

was the beginning of a system which the Government intended to substitute for the old guarantee. In these cases the Government provided the necessary land free of cost, and granted the following subventions:—

- (1) To the Indian Branch Railway Company—Rs. 1,000 a mile per annum for 20 years and an addition of Rs. 10,000 per annum on every lakh of rupees expended on bridges which were to cost more than one lakh of rupees each.
- (2) To the Indian Tramway, Company, Rs. 125 annually per mile as a contribution towards the cost of the maintenance of half of the Government road not occupied by the railway.

These terms were however subsequently abandoned and the two companies became guaranteed, with the titles of the Oudh and Rohilkhand Railway Company and the Carnatic Railway Company respectively, under their contracts, dated 2nd August 1867 and 1st March 1870. The rate of interest guaranteed to the latter company was however 3 per cent. per annum only from 1st January 1868.

The principal conditions of the proposed agreement with the Indian Branch Railway Company were recorded in para. 17, page 7 of the Government Director's Report on the Railways for 1864-65. The conditions of the Indian Tramway Company were embodied in its contracts dated 25th August 1867 and 1st March 1870.

The Indian Branch Railway Company finding themselves unable to raise money without a guarantee, limited the scheme to the two branch lines. When the contract for their undertaking was made under the guarantee, the Nalhati branch remained in their hands and they sold it to Government for £30,000, when it became a State Railway.¹ The Nalhti State Railway was incorporated with the East Indian State Railway on 1st April 1892 and converted from 4 feet gauge into the 5'-6" gauge on 15th July 1892.

¹ Para. 82, page 86 of the Govt. Director's Report for 1871-72.

The Carnatic Railway Company was amalgamated with the Great Southern of India Railway Company on 1st July 1874 and the combined Companies assumed the little of the South Indian Railway Company, and the line from Arkonam to Cudalore was converted to the Metre-gauge in July 1878.

SECTION 2.—Capital expenditure.

The excessive cost of railways incurred by the Guaranteed Companies was soon noticed by the Government of India, as in a despatch No. 2, dated 29th November 1859, Lord Canning, then Viceroy, wrote to the Home Government, referring to the great need for restraint on the capital outlay. The President of the Viceroy's Council, Sir J. P. Grant, took a stronger view and objected to the dual management and especially to the financial basis of the system. He said that it really implied "the raising of money by a special public works loan, but under conditions the most disadvantageous possible for the public, who must be taxed for the payment," that the money was not raised at the lowest market rate, and that instead of repayment being at the option of the borrower (the Government), this could not be done, whatever the loss might be in keeping it, while the lender could at any time reclaim it, or an equivalent annuity, whatever the financial position of the Government might be at the time". The Finance Member of Council, Mr. S. Laing, writing in April 1861, also recorded an opinion against the system, on the grounds that the management was non-resident and that the data as to first cost and probable traffic being so uncertain, the Companies looked almost exclusively to the guarantee. He considered that these two factors went far towards neutralising all the advantages of private enterprise, and that although, as a general rule, and under ordinary circumstances in commercial matters, joint-stock management must be held to be greatly superior to that of a Government, yet that this advantage could not be claimed when the real Company was 5,000 miles away and the

guarantee absolute. The share-holders had their 5 per cent. whatever happened. This was probably all that they expected, and consequently no adequate motive existed for restraining the outlay on the works.*

Assured of a high rate of interest on the capital subscribed, and refund of full capital even on surrender, they took no interest in keeping the expenditure down either on the construction or on the working and maintenance of the railways. The capital cost† of railways constructed by the old Guaranteed companies and by the State Railways constructed through the Government administration compared as shown below:—

I.—Old Guaranteed railways.

Miles open on 31-12-80.	5'—6" gauge.	Capital cost per mile upto 1880. Rs.
1504.25	East Indian	2,19,643
1275.75	G. I. P.	1,95,945
28.00	C. & S. E.	2,37,137
858.00	Madras	1,29,572
444.00	B. B. & C. I.	1,86,582
663.50	S. P. & D.	1,66,470
158.00	Eastern Bengal	2,08,035
546.75	Oudh and Rohilkhand	1,05,709
645.25	South Indian 3'—3½" gauge	64,584

II.—State Railways.

5'—6" Gauge.

653.00	Indus Valley	1,06,099
224.75	Punjab Northern	1,78,138
66.50	Sindia	1,22,585
53.00	Nagpur-Chhattisgarh	57,315
46.50	Wardha Coal	1,11,156
145.75	Dhond-Manmad	71,756

* Railway Policy in India by H. Bell, pages 65-66.

† Pages 770-781 of Report of Select Committee of 1884.

State Railways.

57.00	Patna-Gaya	...	56,508
12.00	Dildarnagar-Ghazipur	...	60,480

3'—3½" Gauge.

243.50	Northern Bengal	...	80,796
85.00	Tirhut	...	62,821
29.00	Muttra-Hathras	...	37,523
86.50	Cawnpore-Farrukhabad	...	36,196
826.57	Rajputana	...	62,989
289.22	Holkar and Sindia-Neemuch	...	1,09,500
161.00	Rangoon and Irrawaddy valley	...	76,443
82.63	Western Rajputana	...	76,452

The cost of the old Guaranteed railways was very much higher than that of the State railways. They are all on the 5'—6" gauge, with the exception of the South Indian. The cost of the Broad-gauge railways is usually higher than that of the Metre-gauge, though not to the same extent as the above figures show. Among the expert witnesses who gave evidence before the Select Committee of 1884, almost every one of them admitted that there was a great waste of money, on the old Guaranteed railways, during the early parts of their construction. Sir A. M. Rendel, Consulting Engineer to Indian Railway Companies and Government in England, in answer to question No. 5721, said—

"A great deal of the waste of expenditure on Indian railways in their early history was due to want of experience on the part of every body connected with them."

Major Conway Gordon, R. E., Indian delegate for State Railways, putting the matter mildly, made the following statement in reply to question No. 4335:—

"That the cost of the old lines was considerably increased by causes special to the time at which they were constructed, such as for instance defective communication, disturbances and delays arising from the Mutiny, the excessive cost of carriage of the material, etc. and also to the fact that on many of the old lines the embankments and part of the bridge-work were constructed at first for a double line. The fair-sized standard gauge lines constructed by the State have been the Indus Valley and the Punjab

Northern Railways, and both of these were first constructed as Metre-gauge lines, and afterwards turned into standard gauge at a large additional cost. The only other standard gauge line which could be made to serve for purposes of comparison are the Sindia and the Dhond-Manmad, the cost of the former appears high owing to the large expenditure on the Chambal bridge thrown over a short length of line, while the cost of the Dhond-Manmad line appears low owing to the absence of Rolling Stock."

The fact of the matter with regard to the Guaranteed Railways was vividly brought out by question No. 304 put by Mr. Onslow and the answer given thereto by General Strachey, R. E., C. S. I., F. R. S. This question and answer are given below:—

"304. Under the guarantee system there was every inducement, if I may so put it, to a Company not to economise, because, as long as they could raise the capital, there was a guarantee of 5 per cent. on the East Indian Railway, at all events for many years, there was an enormous waste of money on account of this guarantee of 5 per cent. in the construction of the line? I would not say that I think myself that the East Indian Railway is the best managed Railway in the world. There was a certain amount of waste, partly unavoidable, *and partly avoidable*, during the first 10 or 15 years of its life, and no doubt the fact that the interest was guaranteed, and *that as soon as the shares rose to a premium, every additional shilling that was spent on the line put money into the pockets, of the shareholders, of course was not an inducement to economy that is admitted.*"

The italics are ours throughout in this section and in the next two Sections.

In question No. 6908, Sir Juland Danvers was asked why the Central Bengal Railway was very much cheaper than the Eastern Bengal and many other lines. He said—

"I can only explain it by the fact that very much better experience has been gained in Railway Construction in India since the Eastern Bengal was constructed; that the material was very much cheaper than it used to be, that freights are lower for the conveyance of materials from this country (England), and that every thing is lower excepting labour, and that is not a very material point in the construction of Railways."

In answer to further questions, he stated that the cost of the Eastern Bengal was high, something like £14,000 a mile "with very serious bridges" which did not occur on the Bengal Central.

The cost of the latter he gave at 58,000 rupees a mile, which was under £5,000 at the rate of exchange in 1884.

In the case of State Railways, General Strachey mentioned that the cost of some Railways went up through financial stringencies, such as the one caused by the Afghan War in 1878-79, when the State Railways had to suspend work for want of funds and started again and then again suspended it for some other cause such as change of policy, etc.—(Questions Nos. 69 to 73).

From the general tenor of the opinions expressed before the Select Committee, it is clear that there was a great waste of expenditure in the early days of the old Guaranteed Railways, due primarily to the guarantee given by Government to the Companies, who did not take that interest which an unguaranteed company would have taken in self-interest. Lieutenant-General C. H. Dickens, R. A., who was once Secretary to the Government of India, P. W. D., made this perfectly clear by his answer to the following question :—

“Question 3312”. Is not it the case that under the old system of guarantee there was an enormous amount of waste of money, for this reason that the promoters knew they could get their 5 per cent. and there was no inducement of any sort or kind to economy in construction? Answer.—That is certainly so.”

In a note written by Sir Juland Danvers in his annual report on Railways in India for the year 1872-73 (pages 23-25), he remarked, “that the cost of lines recently constructed . . . has been much less than the average cost of those railways which form the original main system. Instead of £18,000 and £20,000 per mile, we now see lines constructed on the 5 feet 6 inches gauge for £4,000, £6,000, and £9,000.” He did not however share the opinion that the greater proportion of the excessive cost was due to the guarantee system and explained that the B. B. & C. I. Railway and the Eastern-Bengal are lines, which in a comparatively short space, comprise several works of magnitude and expense, as bridges, flood openings, and terminal stations and are not

therefore fair examples."

"The cost of the G.I.P." he admitted, "*has been increased by mistakes which were avoidable.*" The East Indian Railway he took as a fair specimen of an expensive and well constructed line and, after deducting the extra expenditure involved by the Southal rebellion in the second-half of 1855 and by the Indian Mutiny, also that due to the double line of 414 miles, and of Locomotives and rolling-stock, he worked out the average cost of this line at 12,250*l.* per mile of a single line of actual construction.

The effect of the high capital cost of the E. I. Ry. is evident from the low percentage of its net earnings, as compared with those of the Rajputana Malwa and the B. B. & C. I. Railways:—

Year.	Percentage of net earnings on Capital Outlay.			Percentage of working ex- penses on Gross earnings.		
	E. I. Ry.	R. M. Ry.	B. B. & C. I. Ry.	E. I. Ry.	R. M. Ry.	B. B. & C. I. Ry.
1892	9.51	10.47	8.67	29.34	41.12	42.92
1893	9.40	10.50	10.12	30.15	43.20	36.55
1894	9.70	10.26	10.50	31.39	41.79	36.85
1895	9.82	10.96	11.17	31.61	42.45	37.69
1896	9.60	8.55	8.84	32.46	43.97	45.07
1897	9.56	8.26	8.63	29.47	48.00	54.63

Although the percentage of working expenses was the lowest on the E. I. Ry. chiefly because of its cheap coal, still its return per cent. on capital was the smallest of the three, except in 1896 and 1897. This clearly demonstrates that the capital cost of the E. I. Ry. was unduly high.

Taking the results up to the end of 1868, Lord Lawrence, in

para. 24 of his Minute dated 9th January 1869, noted an excess of 13 millions sterling over an estimated cost of 86,500,000/. He wrote—

“Now going back only to 1865, I find that in that year the estimated sum required to complete the authorized lines, aggregating 4,900 miles in length, was 77,000,000/, at the present time the estimate has already reached 97,000,000/, for a length of 5,859 miles, and the actual amount needed is more likely to be 100 millions. Thus with an increased sanctioned length of 959 miles, the estimate for which is 9,500,000/, there has been an addition to the probable outlay on the old lines of about 10 millions, and perhaps as much as 13 millions without any extension of their actual length. If the comparison had been made with an earlier period, the result would have been still more unsatisfactory, as regards the growth of the guaranteed capital, without any commensurate extension of the mileage of railways for the country at large, and with a tendency to stationary traffic returns.”

“The experience of India in respect to the growth of railway capital is thus beginning to teach the same lesson that has been taught on a gigantic scale in England, namely, the urgent necessity for resisting the tendency to incur additional capital outlay, without creating clear additional paying power in return. The enormous and ruinous extent to which the capital accounts of many English Companies have become inflated has been for sometime past the theme for public discussion. If this can have happened in England, under conditions best suited to secure economical management, how far greater is the danger for India, *where all ordinary restraints are removed by the grant of an absolute guarantee of interest*, which is now well known to be in fact, subject to no limitation whatever. I regard this danger with great concern, both in relation to the prospects of existing lines, and our hopes of extending them. If the Government is to avoid it, some means must be found for putting an effectual stop to the insidious growth of the capital of the old lines.¹

The working results of these guaranteed lines showed deficits throughout the period of their existence from 1849 to 1907. Were it not for the measures taken by Lord Lawrence, India would have been overburdened with liabilities and would have found itself in difficulties similar to those which England has in

¹ Report of the Select Committee on East India Public Works 1878. page 356.

the way of nationalising its railways which are owned by private Companies. As it is, India will not be able to clear for some generations the burdensome debt taken to acquire the old guaranteed lines, while the tremendous loss of 3,19,95,39,690 rupees shown in Appendix No. 3A has kept back the general progress which the country would have made in education, sanitation, etc., had not that money been lost on the guarantees to the old railway companies.

SECTION 3—Evils of the guarantee system.

The guarantees given to the railway Companies during the years 1849 to 1870 were generally condemned. In answering question No. 19 before the Select Committee of 1884, the late General Richard Strachey, R.E., C.S.I., F.R.S., gave a very fair idea of these guarantees. He said—

"I have a very decided objection to giving a guarantee and particularly to giving guarantees in the form in which they had been given up to the present time. I have had considerable experience in watching the manner in which the operations of the guaranteed companies have been carried out, and I say, without any hesitation, that the system of giving an absolute guarantee on the capital has been productive of a very great waste of money. Not only has it been productive of waste of money, but it also has created a very valuable property at the expense of the tax-payers of India, which has passed into the hands of third parties without their having incurred, in any sort of way, any risk. There was not an enterprise. They not only had a securely guaranteed rate of interest settled virtually for an indefinite period of time, but it was a high rate of interest, and at the same time they got a virtual monopoly. What has been the result of it? I will give you an instance in the case of the Eastern Bengal Railway. The Eastern Bengal Railway is very profitable. It will be bought by us in July at the rate of about £150 for £100 of stock and possibly a little more. We shall have to pay for every £100 originally subscribed, £150 or something of that sort. And how has that additional value of £50 been created which will be given in addition to the original £100 when we buy the railway? It has been partly by the guarantee of the State which means payment from the taxes of India, and in the next place through the action of the monopoly. The net income of this

line recently was, in one half-year, at the rate of 14 per cent. per annum on their capital. The profits have been very high. The stock of the railway would not have risen in the market to £150 if they had not been very considerable. I say that *according to my judgment, this is an entirely unjustifiable application of the resources of India for the benefit of private persons.*"

In answer to question No. 22 General Strachey added—

"Under the system of what you may call them private enterprise, the Companies get a monopoly, and at the end of a series of years, if they are called upon to sell their property which has attained an artificial value by reason of the monopoly that they get, or any assistance that they get from the State, it is unreasonable that they shall receive a very large premium on their investment, and I hold that the State, under these circumstances, ought to be able to acquire the property for India at a far more reasonable rate; that is to say, a rate really not exceeding the original amount of capital that was put into the concern. I would also say that I have this great objection to the giving of a guarantee, on railway capital, that it is perfectly certain that if the Government again begins to give a guarantee of interest on railway capital, then you will never get a sixpence of unguaranteed capital".

This prophecy has turned out to be true, as Government assistance in one form or another is still being given to railway Companies.

Questions No. 5297 and 5298 raised by Sir George Campbell and the answers given to the same by Mr. Westland, Comptroller and Auditor General to the Government of India, before the Select Committee of 1884, again furnish a fair idea of the matter. They are quoted below in full:—

"5297. Is it not the case that the Government guaranteed 5 per cent. upon a very large amount to the old guaranteed Railway Companies at the time when they could borrow in the market at 4 per cent., or a little over 4 per cent? I think that is the case; but then they could not have got the amount of capital which was requisite for the guaranteed railways or anything like it. They may have been able to get a small amount of money but they would not have been able to get the large sums they required for the guaranteed railways".

"5298. Was not it the case for a very long period, whether from prejudice or fashion, one or the other reason, the money raised upon

far less favourable terms than money borrowed directly by Government? I think it is to be accounted for by the magnitude of the transactions."

The opinion of General Strachey on this point was more emphatic, see his answer recorded against question No. 309, quoted below:—

"309. But is it not the case that the Government of India of the day, when they sanctioned this guarantee to the East Indian and other railways, could not have practically borrowed the money themselves?"

"I do not know whether they could or not. There is no evidence that they could not, at all events, they thought that it was better that they should not. *My own impression is that that was a delusion, the probability is, in fact it is almost a certainty, that they could have borrowed the money, on better terms than the Company.*"

In answer to question No. 4295 before the same Committee, Major L. Conway Gordon R. E. gave the following three as the principal disadvantages to the Government in the terms which were concluded with the old Guaranteed Companies:—

First disadvantage.—The rate of guarantee having been fixed as high as 5 per cent., the unfortunate result of this high rate, "has been aggravated owing to the action taken by the Secretary of State in the year 1870, when he gave up the right of purchasing at the first contract period of 25 years the G. I. P. Railway, the Bombay and Baroda and the Madras Railways."

"In the second place, the terms agreed upon, under which Government can purchase the guaranteed railways, have turned out to be so disastrous owing to the great rise since in the credit of the Indian Government. The Government when taking over the guaranteed lines must pay the mean market value in London of the shares during the last three years preceding the notice of purchase. Had the credit of Government not risen, the only premium that Government would have had to pay on the shares, would have been that due to their value as shares in an ordinary commercial undertaking, for the only shares that would have stood at a premium would have been those which were earning more than 5 per cent. In the case of lines earning less than 5 per cent the shares would have stood only at par, but as it has turned out, owing to the credit of Government having risen, the shares of Companies, which are practically commercial failures, stand at a premium, owing to the 5 per cent. Government guarantee, and Government has thus to pay a higher sum for the railway, simply

owing to the rise in the credit of Government."

"The third mistake in the old contracts was laying down a fixed rate of exchange for all transactions between Government and the Company. This was the most fatal blunder of all, for events have turned out singularly unfortunately for the Government, and in a way that no one would possibly have foreseen. The exchange has so unfortunately fluctuated that when the Companies were remitting the bulk of their capital out to India the fixed rate of exchange was in their favour. Directly the Companies began to remit their revenue earnings home to England, exchange fell so that the fixed rate of exchange became in their favour again in the other direction. The rate of exchange fixed in the first guaranteed contracts was 1s. 10d. per rupee and while the old Companies were remitting the bulk of their capital to India the rate of exchange of Council bills varied from 2s. 0½d. to 1s. 11½d. The Indian Government for every rupee the Companies spent in India lost from 1d. to 2d. This loss was so great that when the contract was concluded with the Oudh and Rohilkhand Railway in 1867, the contract rate was raised to 2s. per rupee. Against this loss in remitting the Companies' capital to India, Government always fondly hoped to gain when the Companies revenue had to be remitted home at the contract rate of 1s. 10d. If you will turn to paragraph 2 of Mr. Danver's Report for 1871-72, you will see that as late as that year Government was dwelling with satisfaction on this hope. Mr. Danvers then writes. 'Assuming that 2s. the rupee has been the average prevailing rate for bills of exchange drawn upon India, the net loss incurred by Government hitherto would be about 2,942,400l, the gross loss having been £3,180,963 and the total gain £238,557. The time has now arrived when the Government will recover much of this loss from the net revenue receipts, all of which are credited to the Government at 1s. 10d. the rupee. This year, if the prevailing rate of exchange had been 2s. the gain would have been about £250,000 by this means.' Unfortunately, however, in the year 1875-76 exchange dropped below 1s. 10d. and from that time Government has steadily lost on the remittances the other way. Government now loses on every 2s. of guaranteed interest paid in England, the difference between 2s. and the current rate of exchange, or say from 20 to 26 per cent, besides losing further from the Companies' rupee being taken at 1s. 10d. in the calculations of the amount of surplus profits. Those are the three points regarding which, I think, the Government should be careful when concluding any further contracts with private companies."

SECTION 4.—General tendency of Companies.

In this connection we quote below question No. 242 by Sir George. Campbell and the answer given by General Richard Strachey, before the Select Committee of 1884 :—

"Is it not the case, as regards all the railways which have been undertaken by private Companies, and that have failed to pay, the Companies almost invariably have come back to the Government and obtained more favourable terms? Is it not the case that the Port Canning Railway being a total failure, Government was obliged to take it over; and is it not the case that even so lately as the concession to the Bengal and North-Western Railway, when it was found the shares did not go off, they came back again and secured more favourable terms from the Government?"

"As regards the Calcutta and South Eastern line, as it is called, under the terms of the Contract the Secretary of State was bound to pay them back their capital, and he simply acted up to the terms of that agreement. After having paid them a great deal of money under the guarantee, I quite admit it was a most unsatisfactory arrangement. The Bengal and North-Western Railway was a different thing. It is quite true that the promoters of that Company found that they had burnt their fingers. It did not go off on the market as well as had been proposed, and the Government was induced to agree to give up the share of profits in excess of 6 per cent, which had been revised under the original contract, but it had produced absolutely no result, the shares of the Company are in precisely the same condition as they were."

In answer to question No. 233, "General Strachey said the Companies were acting on the "heads I win, tails you lose" principle. This question and answer to the same are quoted in Chapter VI, Section 2. While the old Guaranteed Companies obtained certain concessions in the terms of their contracts, they did not yield in the least in exacting the literal effect of certain terms which on the very face of the matter appeared totally unreasonable. The instances are.—

(a) Exchange calculations in working out surplus profits, the effect of which was that surplus was made out where there was an actual loss, or was largely augmented as shown in the next Section.

(b) Calculation of premiums on share capital, especially in cases where the railways did not earn them by the actual results of their working.

(c) The high rate of interest which actually amounted to as much as 9·12 per cent. per annum as shewn in the next Section; while the guaranteed rate did not exceed 5 per cent.

(d) Refusal of the Companies to reduce their rates and fares, or to allow the Government to alter the schedule of maxima rates sanctioned in 1869, *vide* Chapter VII, Section 1.

(e) Calculation of surplus profits on the results of each half-year separately instead of on the results of the whole year, as shown in the next Section.

These instances fully substantiate the charge made by Mr. (now Sir) Dinshaw Edulji Wacha, in his pamphlet *Indian Railway Finance* (page 3), that the companies exacted "the pound of flesh marked in the original bond."

The Port Canning Railway was styled as the Calcutta and South Eastern. It was constructed from Calcutta to Multa river (Port Canning) 29 miles in length, and did not prove a success at the outset, owing to the bed of the river where the Jetty had been put up shifting and being partly carried away, which caused a temporary stoppage of the railway business, the railway having been built before the Port was ready. The Railway Company was so impatient that it took advantage of the surrender clause of its contract, and forced the Government of India to take it over in May 1868. From that time it is being worked as a part of the Eastern Bengal Railway, the Government had to make an arrangement with the Eastern-Bengal Railway Company for its working from 1868 till the Government took this Company's line in 1882.

The authorized capital of the C. & S. E. Ry. Company was £600,000, of which £442,244 were raised upto 31st March 1867, as detailed below :—

			Pounds.
By shares in England	...	...	308,877
By convertible debentures	...	...	112,850
In India	...	...	20,517
		Total	442,244

The total expenditure of the Company up to 31st March 1867 (partly estimated) amounted to £593,188.*

The price paid to the Company by Government was £566,694†

SECTION 5. Loss by Exchange.

The gains and losses by exchange in connection with railway Companies were explained in the following terms in para. 103 of the Appropriation Report on the Accounts of the Government of India for the year 1885-86:—

The Guaranteed and other Railway Companies first deposited their subscribed capital with the Secretary of State in England, of which they withdrew one part there and the other part in India for expenditure on the construction of their lines.

The question of gain or loss did not arise in connection with the amounts deposited and withdrawn in England, but the balance was received in England at the average rate of exchange of the Secretary of State's bills and repaid in India at the rates fixed in the contracts with the Companies. When the contract rates were higher than the rates obtained for Council bills, there was gain to Government on these transactions, but when the contract rate was lower there was loss to Government. The gain or loss, when the money was brought out from England for the construction of the railways increased with the amount of the withdrawals by the Companies in India, and with every fall or rise in the Council bill rate of exchange.

Next there were Capital receipts in India on account of these companies against corresponding payments in England, and in this case the position was reversed, there being loss to Government when the contract rate of exchange was higher, and gain to Government when the contract

* Page 16 of the Annual Report by Sir J. Danvers for 1866-67.

† Foot-note under Account No. 73 in the Finance and Revenue Accounts of India 1917-18.

rate of exchange was lower, than the market rate. One of these receipts consisted of the transfer to Revenue account of Stores purchased in England on Capital Account, but these transfers were computed at the average rate of Council bills drawn during the previous half-year, and they involved therefore, only so much gain or loss as arose from the average rate of exchange of the year differing from that of the previous half-year.

Other losses arose in connection with remittances from India to England, if the guaranteed interest paid to the English Companies, in sterling in England, and with the payments made to them in India under the name of *surplus profits which did not in some cases actually exist but were made up by the process of exchange calculation under their contracts.*

Surplus profits.—Under the revised terms made in 1870 in the contracts with the Guaranteed Railway Companies, a moiety of the excess of net earnings over the interest charges for each half-year ending 30th June and 31st December, taken *separately* was paid to the Companies as their share of "Surplus Profits," but in calculating the total surplus for division, the Secretary of State was able to place against the net earnings, stated in rupees, one rupee only for every 1s. 10d. of the Guaranteed interest which he had paid in England by remittance from India at the market rates of exchange. The share falling to the Companies was therefore, much in excess of a true moiety of the actual surplus if any after meeting the sum which the Secretary of State paid as interest charges.*

In any *half-year* during which the net earnings fell short of the interest charges, the deficiency was borne *wholly* by Government. But calculating the surplus profits for each half-year separately, the companies, when they saw a prospect of surplus profits in one half-year and not in the other half-year of the same year, were encouraged under their contracts to confine as much as possible of their expenditure to the bad half-year, since the lower expenditure in the good half-year increased their dividends, while the increased expenditure in the bad half-year did not affect their minimum return guaranteed by Government.†

* Para. 45 of Note by the Accountant-General P.W.D. on the Capital and Revenue Finance Accounts of Railways in India for 1893-94.

† Page 6 of the Report by Mr. Thomas Robertson, C.V.O. 1902.

The following table shows the direct results to the State of the working of three of the nine old Guaranteed Railway Companies which were unacquired by the Government during the year 1893-94:—

Railway.	Gross Receipts.	Working Expenses.	Net Traffic Receipts (2-3).	Charges.				Gain + or loss— 4—8.
				Interest.	Surplus Profits †	Contri- bution to Provident Fund.	Total. 5+6+7.	
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
G I. P. ...	4,23,04,100	2,35,54,170	1,87,49,930	1,98,82,050	29,27,370	1,24,600	2,29,34,020	-41,84,090
B. B. & C. I.	2,86,59,510	1,88,76,350	97,83,160	68,92,710	24,81,700	1,78,870	95,53,280	+ 2,29,880
Madras ...	1,15,82,460	62,77,430	53,05,030	88,00,160	...	...	88,00,160	-34,95,130
Total ...	8,25,46,070	4,87,07,950	3,38,38,120	3,55,74,920	54,09,070	3,03,470	4,12,87,460	-74,49,340

† For the details of calculating the surplus profits we must refer to the half-yearly accounts of the individual railways, which are not given in the Reports and Accounts published by the Government of India.

III.]

LOSS BY EXCHANGE.

In addition to the above, the cost of land provided at the expense of the State and a proportionate share of the cost of the Government controlling establishments had to be taken into consideration, in order to arrive at the real financial results to the State of its connection with the Guaranteed Railways. The foregoing table, however, shows prominently the effects of the provisions in the contracts, under which surplus profits were declared half-yearly, by converting the sterling interest for the purpose of this division at the fixed rate of 1s. 10d. per rupee. Thus the G. I. P. Railway received as surplus profits during the year the sum of Rs. 29,27,370, while the Government although nominally entitled to share equally with the company, sustained a loss of Rs. 41,84,090. During the second-half of 1893, the net earnings fell short of the guaranteed interest and Government had to make good the deficiency and to bear also the loss by exchange on interest paid in England. The B. B. & C. I. Railway Company received Rs. 24,81,690 as surplus profits, while the actual surplus according to the State was only Rs. 2,29,880.

The State had to continue to pay interest at the guaranteed rates until the contracts terminated, the last one in 1908, and it was consequently unable to obtain any advantage from cheaper money and the improved credit of the country: that is to say, where the State could raise money at $2\frac{1}{2}$ or 3 per cent. to pay off loans raised at higher rates of interest, it had to continue paying interest at a high average rate, which in 1893-94 averaged $4\frac{3}{4}$ p. c. on capital raised by the guaranteed companies, and owing to the fall in exchange, the amount of rupees which had to be remitted to England to pay the sterling interest charges was in that year equivalent to a payment of interest of over 7 per cent. on the total capital raised, converted at the contract rate of exchange.* This percentage varied from year to year.

* Page 9 of the Director-General of Railways' Administration Report on the Railways in India Part I for 1894-95.

The guaranteed rate of interest payable to the old Guaranteed Railway Companies was nominally 5 per cent. per annum in sterling, but it actually amounted to about 9·12 per cent. in the Indian Currency in some years, arrived at in the following manner:—

Take, for instance, the year 1894—95, when the average rate of exchange was 13·10*d.* per rupee. For every 100 pounds of the capital deposited by the old Guaranteed Companies with the Secretary of State for India in England, the Government of India had to allow the Companies about 1,091 rupees in India for Capital Outlay on the railways, irrespective of the actual amount they received in bringing out the money from England to India, and the number of rupees taken from the net earnings of the Railways towards the payment of the 5 per cent. guaranteed interest was £5 × Rs. 10½ = Rs. 54·545, only at the contract rate of exchange, while it cost the Government of India Rs. 91·60 to remit the £5 to England at the market rate (13·10*d.* per rupee) of exchange, in other words the Government of India paid as much as, for instance in 1894—95, Rs. 91·60 on every £100 of the guaranteed capital, which gave the rate of 8·39 per cent. per annum on the capital of Rs. 1,091 per £100.

Over and above this, the Government of India paid Rs. 57,76,044 for the moiety of the so-called surplus profits for the calendar year 1894 to the three Guaranteed Companies. Let us take, for example, the case of the G. I. P. Railway. Its figures for that year were as under:—

		Rs.
1. Gross Earnings	...	3,62,74,296
2. Working Expenses	...	1,93,40,878
		<hr/>
		1,69,33,418
3. Less (a) Rent of leased lines	...	5,50,478
(b) Irrecoverable Outstanding earnings written off	...	13,797

(c) Contribution to Provident

Fund	...	...	1,26,357
4. Net Earnings	...	...	1,62,42,786
5. Moiety of surplus profits paid to the Company	...	...	30,40,331*
6. Net receipts by Government	...	...	1,32,02,455
7. Interest actually paid by the Secretary of State	...	...	1,31,54,992
8. Net gain to Government	...	...	47,463

The moiety of surplus profits obtained by Government on division with the Company was Rs. 30,40,331 which, owing to the loss incurred by Government in remitting the guaranteed interest to England, dwindled down to Rs. 47,463. The actual surplus profit was Rs. 30,87,794 as shown below:—

		Rs.
Net earnings as shown above	...	1,62,42,786
Interest actually remitted to England...	...	1,31,54,992
Surplus	...	30,87,794

Half of this surplus was 15,43,897 only, whereas the Company received Rs. 30,40,331 or Rs. 14,96,434 in excess, which works out to 0·73% on the share capital of £20,000,000 = Rs. 21,81,81,818 at the contract rate of exchange. The guaranteed interest therefore actually amounted to 9·12% in this case as below:—

	Per cent.
Guaranteed interest as worked out above...	8·39
Excess in so-called surplus profits	0·73
	9·12

* The surplus profits were worked out as under:—

	Rs.
Net earnings	1,62,42,786
Guaranteed Interest at 1s. 10d....	1,01,62,124
Surplus divisible equally between Government and Company	60,80,662

Over and above these, the Government had to bear the cost of Government Control and the interest charge and loss of revenue on the land provided, which in the case of the G. I. P. railway for that year was as under:—

	Rs.
Net cost of land made over to the G. I. P. Railway upto 1894	38,15,000
Capitalized value of land revenue lost by Government upto 1894 on account of G. I. P. Railway	4,31,415
	<hr/> 42,46,415 <hr/>
4% interest on above	1,69,856
G. I. P. Ry. share of cost of Government Control during the year 1894	1,73,781*
	<hr/> 3,43,637 <hr/>
Total indirect charges... ..	

SECTION 6.—Purchase of Guaranteed Railways.

Clause 21 of the original contracts laid down that at the end of the term of 99 years, "by effluxion of time, the land with the railway thereon and all buildings, works, fixed machinery, telegraphs and conveniences whatsoever, shall revert to and become the property of the Government of India, free from all debts and charges whatsoever, save such as shall have been sanctioned by the Government of India. The Government of India were only "bound to purchase all the engines, carriages, stock, machinery and plant which shall then be used in working the said railway."

The contracts also empowered the Government by giving six months' notice to acquire them after the first 25 years, and one of these railways (the G. I. P. Ry) could have been taken over in 1874. During the year 1869, however, negotiations were entered

* Mileage share of the total cost of Rs. 2,33,058 on joint account of the G. I. P. 1,287 miles and E. B. & C. I. 439 miles.

into by the Secretary of State for India, without reference to the Government of India, for relinquishing this right on certain conditions: These were in substance that on the understanding that the State would extend the existence of the companies for the second period of 25 years and would forego the arrears due by the companies for guaranteed interest, a new contract should be executed; in which it should be stipulated that for the remainder of the lease, surplus profits over and above 5 per cent., should be divided equally between the Companies and the Government. The intentions of the Home Government became known to the Government of India, but indirectly only, and a protest was sent by them, as soon as possible, against this policy, although as it happened too late to have any effect on the ultimate decision. The despatch of the Government of India (No. 80 of 12th August 1870) indicated, and in forcible language, the objections taken to the proposal. It pointed out that various considerations had made it seem desirable that the Government should acquire the Guaranteed lines as soon as possible, and that the concession by the Companies with respect to the disposition of surplus profits was in effect, no concession at all, while on the other hand the surrender of arrears of interest, and of the right to acquire the lines after the first twenty-five years would mean a very serious loss to Government. There was no apparent object in making such concession and the despatch added: "The credit of the Government was never better; the undertakings of these companies are approaching completion, their demands on the money market have almost ceased, and their stocks are quoted at a considerable premium. It is therefore in vain that we seek to discover the grounds which have actuated Her Majesty's Government in this matter, and looking at the stage at which it has arrived, as evidenced by the interpellations in Parliament, we cannot but regret that no opportunity was afforded us of placing your Grace in possession of the views we entertain on this important question".

As already mentioned this protest arrived too late to affect

the decision arrived at by the Secretary of State, and new Contracts on the above conditions were granted, first to the G. I. P. Railway, and later on to the Bombay, Baroda and the Madras Railway Companies. It is not possible to offer the reasons which led the Home Government, to adopt this course, which was taken not only against the opinion of the Government of India, but in the face of facts which should seemingly have offered good grounds for a decision of a directly opposite character, *viz*:—to acquire these lines for the State at the earliest possible date.† The result was a distinct gain to the share holders of the first-two companies at the loss of the State. This is one of the many instances of the undue gains and special privileges which the English Companies with their Head offices in London, were enabled to secure by their direct access to the India Office under the supreme authority exercised by the Secretary of State over Indian affairs.

The dates of acquirement by the State of the Guaranteed Railways and the purchase prices paid for them are given in appendix 4.

The liabilities for the debentures amounting to 22,726,908/ of all the guaranteed Companies were transferred upon the Secretary of State for India. The prices paid for the share Capital of the Companies compared with the original Capital as shown below :—

Railways.	Share Capital.	Price paid.	Premium.
	£	£	£
East Indian ...	26,200,000	32,750,000	6,550,000
Eastern Bengal ...	2,255,480	3,391,917	1,136,437
S. P. & D. ...	11,075,320	14,009,124	2,933,804
O. & R. ...	4,000,000	5,036,049	1,036,049
G. S. of I. ...	3,208,280	4,197,557	989,277
G. I. P. ...	20,000,000	34,859,218	14,859,218
B. B. & C. I. ...	8,745,056	12,089,146	*3,344,090
Madras ...	10,257,630	12,819,558	2,561,928
Total ...	85,741,766	119,152,569	33,410,803

† Railway Policy in India, pages 25—27, by Horace Bell.

* Page 15 of Railway Board's Administration Report Volume II for 1917-18 gives the B. B. & C. I. Premium at £4,135,280.

Over the total share capital of the eight Companies amounting to 85,741,766*l*, India had to pay a premium of 33,410,803*l* or an average of about 38·96 per cent. on that capital.

In the case of the East Indian, the Eastern Bengal, the S. P. & D., the G. I. P. and the Madras Companies, the purchase price was paid partly in the form of terminable annuities, and partly by India Stock. In the remaining cases the payment was made either in cash or by India Stock. In the case of the B. B. & C. I. Ry., 3 per cent. India Stock was issued for 10,089,146*l* in satisfaction of 9,685,581*l* of the purchase price, giving a further premium of 403,565*l* to the stock-holders.

In the case of the Scinde, Panjab and Delhi Railway Company, the Government were empowered to convert the annuities into India Stock. Up to 1893-94, £200,467 10*s*. 5*d*. of the annuities were redeemed by the issue of 3½ per cent India Stock for £4,911,621-6*s*. 1*d*. The balance of £9,097,908 1*s*. 11*d*. remained dischargeable by an annual payment of 371,361*l* 3*s*. 7*d*. which is charged to the Revenue account of the line at the average rate of exchange.*

Under the contracts of the Companies, the purchase price was to be paid either in lump sum or in the shape of an annuity, payable half-yearly in London "to be reckoned from the time when the gross amount would be payable and to continue during the residue of the term of 99 years, the rate of interest used in calculating such annuity being determined by the average rate of interest during the preceding two years received in London upon public obligations of the East India Company and other public obligations in London by the Secretary of State in Council and which shall be ascertained by reference to the Governor and Deputy Governor of the Bank of England for the time being".†

The terms concluded in 1878 for the purchase of the E. I. Railway, based mainly on the provisions of the Company's

* Page 23 of the Administration Report part II for 1893-94.

† Page 16 of the Report on Railways in India for the year 1870-71 by Sir Juland Danvers.

Contract, were as follows :—

(i) The Capital Stock amounted to 26,200,000*l* and the Company were entitled to be paid either in cash at the average price of the stock during the three previous years or by annuity for 73 years equivalent thereto. The average price of the stock was taken at 125*l* per cent. so that the total amount payable in cash was 32,750,000*l*.

(ii) The Government, however, preferred to convert the sum into an annuity of £1,473,750 for 73 years. One-fifth of this annuity, namely £294,750 has been deferred under the new contract entered into with the Company in 1879, leaving the capital sum representing the deferred annuity, *viz*:—£6,550,000 in the hands of the Government to be regarded as the capital of the reconstituted Company, on which they receive 4 per cent. interest per annum, plus $\frac{1}{3}$ * of the yearly net profits made by the Railway.

Whenever the new contract of 1879 terminates, those who hold the one-fifth of the annuities, will receive upto the 14th February 1953, the annuity of £5-12*s*. 6*d*. for every £125 or for every £100 of the £5,240,000 original unconverted stock. The undertaking represented a sum of £32,750,000, the amount of purchase money, and the whole of this will have been paid off by the 14th February 1953 by means of the annuity.

In order principally to accommodate trustees who could not accept the annuity, the Government made a subsequent offer of £125 of 4 per cent. India Stock in lieu of the amount of £5-12*s*. 6*d*. This was largely taken advantage of by the holders of the Company's stock. The new stock thus issued is being redeemed by a Sinking fund created out of the difference between the interest (£5) on such stock and the annuity (£5-12*s*. 6*d*.) which is payable out of the earnings of the railway.

The E. I. Railway Company Purchase Act 1879, passed by the Parliament, provided for an annual sum not exceeding 7*s*. 6*d*. to be set aside for those annuitants who might desire it, for the

*This proportion was revised by a Contract dated 14th November 1899.

purpose of redeeming the whole £125 by the end of 73 years.

The Eastern Bengal, the S. P. & D. and the Oudh & Rohilkhand Railways, were on purchase, taken over absolutely by the Government and have since been worked under direct State management. The Madras Railway has been divided between the South Indian, and the Southern Mahratta Companies. The East Indian, the South Indian, the Great Indian Peninsula, and the B. B. & C. I. Railways have been leased for working to the Companies which had formerly owned them, under new contracts providing that the companies should supply in some form or other a small amount of capital, on which they receive a certain rate of interest guaranteed by the Government, together with a share of surplus profits. These companies and also the Southern Marahatta, the Bengal Nagpur, the Assam Bengal, and the Burmah Railways Companies, which are of more recent origin, have no rights of property in the lines which they administer, but are in the position merely as working agents for the Government.*

After purchase of the Madras Railway, the line was made over to the Southern Marhatta Railway, with the exception of the Broad-gauge Section from Jalarpet to Mangalore, which was transferred to the South Indian Railway Company, in exchange for its metre-gauge sections between Katpadi and Dharmavaram, and Pakala and Gudur, which were absorbed in the Madras and S. M. Railway Company's system.¹

The Madras Railway was opened in 1856 and its working results showed net losses to the State throughout the whole period from 1856 to 1907, while its earnings per mile per week and the percentage of its working expenses upon gross traffic earnings varied as follows:—

*Para. 2 of the Report of the Mackay Committee (1908).

¹ Page 7 of the Railway Board's Administration Report for 1907.

	Earnings. Rs.	Percentage of W. E.		Earnings. Rs.	Percentage of W. E.
1856 ...	75	51.66	1890 ...	218	52.44
1860 ...	117	73.50	1900 ...	254	51.75
1870 ...	146	52.84	1907 ...	335	66.16
1880 ...	138	68.24			

In the last year of the Company's administration, the net loss to the State amounted to Rs. 33,86,120. In other years it varied from 23 to 47 lakhs per annum between 1879 and 1906.

While the State was paying losses annually, the Company received the following sums as the moiety of the supposed surplus profits:—

	Surplus Profits. Rs.	Net loss to the State. Rs.
In 1895	53,195	38,60,320
„ 1897	91,135	25,90,167
„ 1898	90,546	29,18,080
„ 1906	1,25,000	27,17,976

Taking the year 1895, the loss worked out as under:—

Gross earnings	...	1,12,08,407	
Working expenses	...	53,98,097	
Net earnings	...	58,10,310	
Guaranteed interest			
actually paid	...	96,17,435	
Surplus profits	...	53,195	96,70,630
Net loss	...	.....	38,60,320

SECTION 7.—Financial Results.

When the Government purchased the Railways from the old Guaranteed Companies, India had to pay not only the Capital cost including the “enormous waste” in the construction expenditure, but it had to pay also high premiums thereon, which were due entirely to the high rate of safe interest guaranteed on behalf of the Indian tax-payer.

These premiums alone amounted to £33,410,803 = Rs. 50,11,62,045.

Over and above these charges which have been debited to the Capital Account of the Railway Section of the Government of India, there were heavy losses incurred annually from 1850 to 1908 on the working of the old Guaranteed railways. They included the guaranteed interest and surplus profits paid to the Companies, together with the cost of land and capitalized value of the loss of land revenue, cost of Government supervision excluding leave allowances and pensions paid to the Government staff employed on supervising the affairs of the Companies, as also the Loss by Exchange incurred in bringing out the capital of the Companies from England to India and in remitting the guaranteed interest from India to England. The last item is of a considerable amount and was practically ignored in the Railway accounts kept in India until the fact was brought by the Secretary of State to the notice of the Government of India in 1884.¹

Overlooking the loss by exchange on the railway transactions, the Government of India both in the P. W. D. and in the Finance Department, were counting upon profits from the working of the Indian Railways during the years 1877-78, 1880-81, 1881-82, etc., while there were in reality losses if the figures of the loss by exchange were included. These were, under the system in force, included in the accounts under the Main head "E" "Miscellaneous," "Sub-head "Loss by Exchange," which showed the loss by exchange on the whole remittances to England on every account.* The figures recorded in the Railway Accounts showed the English figures at the conventional rate of Rs. 10 to the pound.

¹ Despatch No. 143 (Financial) from Secretary of State to Government of India, dated 27th May 1884, pages 702-9 of Report of the Select Committee of 1884.

* Major Conway Gordon's answer to question No. 3505 before the Select Committee of 1884.

With such incomplete figures of the Railway expenditure, the following incorrect figures were given in the Financial Statement of 15th March 1884, as the net result to the State from its connection with railways:—

	Incorrect figures as shown in the Financial Statement.	As corrected by adding the loss by Exchange.
	Pounds.	Rs.
1880-81...	- 50,612	- 1,11,74,320
1881-82...	+1,035,342	- 20,59,236
1882-83...	+419,343	- 53,51,212
Estimate. 1883-84...	+787,530	- 65,08,714
„ 1884-85...	+1,079,240	- 61,10,839
Net result of 5 years.	+3,270,843	- 3,12,04,321

Instead of the net profit of £3,270,843 as shown in the Financial Statement, there was actually a loss of Rs. 3,12,04,321 as shown above.

To remove this misapprehension, a statement of the direct financial results of the transactions connected with the railways in India from the commencement (1848-49) to the year 1884-85 was prepared by the India Office, London. This statement is printed at pages 706-707 of the Report of the Select Committee of 1884. The figures relating to the old Guaranteed Railways for the period upto 1882-83 are shown in our Appendix No. 2; together with simple interest which we have added at 4 per cent. per annum; subsequent figures extracted from the Tables of Commercial and Financial Statistics appended to the Annual Financial Statements of the Government of India, are similarly embodied in our Appendix No. 3. Both these appendices show a net loss of Rs. 58,07,24,409 (excluding the interest borne by the Revenues of India) from 1848-49 to the end of the year 1907, when the last of the old Guaranteed railways was purchased by the State.

As regards the interest, in answer to question No. 6110 by the Select Committee, Mr. Henry Waterfield who was Financial Secretary at the India Office in 1884, explained that as the State

has advanced the money to the Companies and had at the same time been contracting loans, the interest on loans to the extent of the advances to the companies "has really been charged in the accounts as a result of the railway policy." In answer to the next question he gave the net amount of such interest at 4 per cent. per annum at 30½ Crores of rupees including a small portion on account of the State Railways upto 1884.

According to the principle given above, compound interest on the yearly losses should be added. We have accordingly in our Appendix No. 3A worked out the figures. To the end of March 1918 this interest amounted to Rs. 2,61,88,15,281 and together with the loss of Rs. 58,07,24,409 in the working charges, raised the total to Rs. 3,19,95,39,690 on which interest is still accruing.

During the whole of the working period of the old Guaranteed railways, the year 1877-78 was the only one in which they showed a profit, while in the remaining period of 63 years they showed net losses. The extraordinary result in 1877-78 was due to the large income made from the famine traffic and from traffic to and from the Delhi Durbar held in the historic year 1877.

The Select Committee of the House of Commons on East India Public Works 1878-79 fully endorsed the views embodied in Lord Lawrence's. Minute of 9th January 1869, and recorded their opinion with regard to the policy of employing the agency of Guaranteed Companies for Indian Railways from 1846 to 1867 in the following terms* :—

"This Policy, although it led to the rapid and continuous application of capital to railway extension in India, was not considered conducive to economy either in the execution of the work or in the working of the lines, and the Indian Government finding it difficult to obtain the consent of companies to the alterations in the contracts necessary in their opinion to insure proper control and economy, determined to discard indirect agency, and undertake the works and the working of future lines themselves."

* Pages iv and v of their Report.

Italics are ours. A similar decision was arrived at in regard to the Irrigation Works, where the experience gained with guaranteed Companies was equally unsatisfactory if not worse, for we find the following opinion of the same Select Committee at page vi of their Report:—

“ In 1858 great pressure being brought upon the Government of India to promote irrigation by the same indirect agency as that by which they were then extending Railway communication, the Madras Irrigation Company was formed with a Government guarantee of 5 per cent. upon a Capital of 1,000,000*l*, and a few years after another private company undertook, without a guarantee, the construction of a system of Irrigation Canals in Orissa. Both these experiments have proved costly failures to the State. The arrangements between the Secretary of State in Council and the Orissa Company soon became so involved that it was considered advisable to terminate them by the purchase of the works of the Company, at a price much above their market value. This sale was effected at a time when the Company was practically bankrupt. The Madras Irrigation Company since its formation has succeeded for one year only in meeting its working expenses. The Secretary of State has, in addition to the Guaranteed rate, advanced, free of interest, 600,000*l*, to the directors of this Company, of which 228,000*l* has been repaid; 1,372,000*l*, has, therefore, been swallowed up by this undertaking, without any return whatever to the State.

“ Warned by these fiascos of private enterprise, the Government of India determined to construct themselves all irrigation works for the future. This decision was arrived at in 1867 and from that time all expenditure upon the extension of irrigation works expected to be remunerative, has been together with that upon State Railways, termed extraordinary, and the money required has been obtained by borrowing.

CHAPTER IV.—State Railways.*

SECTION 1.—Introduction.

INDIA began with the old guaranteed railways in 1849. The companies entrusted with the construction and working of these railways were found most unsatisfactory, chiefly on the grounds of economy, both in the costs of construction and working the traffic. They had a guarantee of 5 per cent. per annum in gold, out of the general revenues of India, with fixed rates of exchange between the English and Indian currencies in certain transactions, which raised in some years the guaranteed interest to as much as 9·12 per cent. per annum in the Indian currency. Guaranteed with such a high rate of interest on all the capital they raised on their shares, they did not take much care in economizing the cost of constructing the lines, nor did they take a keen interest in economical working or in developing the traffic by suitable rates and passenger fares, especially when there was no chance of making *surplus* profits, in which they were allowed half a share. Their unsatisfactory working was found out by Government as early as the sixties, and in 1860-61 it was decided that no more contracts were to be allowed under that sort of guarantee. Under the contracts already made and subsequently modified is 1870, however, the companies continued their operations till the end of the year 1907, when the last of those guaranteed railways, the Madras Railway, was purchased by Government. The matter relating to these companies has already been dealt with in Chapter III, where the prominent features of the results of their administration have been brought out in detail.

* The term "State Railways" generally applies to railways belonging to the British Indian State. In older records, they are styled as Indian State Railways. This term is now applied to what were formerly termed as "Native State Railways."

In the year 1863 attempts were made to introduce Subsidized Companies. Two of them were formed, which undertook the construction of three branch lines, viz :—

1. Nalhati to Murshidabad 27 miles.
2. Cawnpore to Lucknow 42 „
3. Arkonam to Conjeeveram 18 $\frac{1}{2}$ „

but as they failed to obtain capital without a Government guarantee, they were eventually formed into guaranteed companies, and the first of these three lines which had been completed without guarantee, was surrendered by the Subsidised Company to Government, who purchased it and styled it as a State railway. This and the C. & S. E. Railway surrendered by the Guaranteed company of that name in 1868, were the first among the Indian State Railways.

As capitalists were unwilling to undertake the provision of railways in India without a guarantee which was condemned on all sides as more expensive and undesirable, the Government definitely decided about the year 1867 to provide further railways as State railways with borrowed funds, to be constructed and worked by the direct agency of Government.

In December 1867 the Government of Sir John (afterwards Lord) Lawrence sent a despatch (No. 125 dated the 3rd December 1867) to the Secretary of State for India, accompanied by minutes by the Viceroy and the Members of Council, to which was added an able and exhaustive note on the guarantee system by Captain (afterwards General Sir) E. C. S. Williams, K. C. S. I., R. E., and also a note by Colonel C. H. Dickens, R. A. then Secretary to the Government of India, P. W. D. The views put forward by Captain Williams marked a new policy. He discussed the advantages and disadvantages of the guarantee system in India, sketched the systems under which railways had been promoted by the State in other countries, submitted proposals for a new system for encouraging railways by State-aid in India, and referred to the desirability of an experiment being made in the construction of railways by direct State agency. Neither in Lord

Lawrence's minute nor in those of any of his Council, was there any mention of this policy; all that was insisted on and with practical unanimity, was that action should be taken towards the ultimate acquisition by the State of all the railways, and that this aim should be steadily kept in view.*

The proposals received only a partial support from Sir Stafford Northcote, Secretary of State for India. A change in the ministry placed the Duke of Argyll in that office early in 1869, and in March of that year, the Government of India addressed a despatch (No. 24 of 15th March 1869) to the Home Government, in which they openly and strongly advocated direct construction by the State.*

Lord Mayo had then become Viceroy; but before leaving India, Lord Lawrence had recorded a minute dated 9th January 1869, in which he showed his complete conversion to this policy and urged that under the guarantee system, the Government was liable to a permanent and probably increasing charge for interest, the burden of which was accentuated by the fact that under the existing arrangements the Government could derive no profit from the most successful railway, while it bore the whole loss of those which did not pay; that there was, in fact, no set-off of profit against loss in the Government share in these transactions. 'The whole profit goes to the companies and the whole loss to the Government.' He said that he was thus led to ask what are the reasons which should induce the Government to accept the position in which it is placed by the present system of Railway constructions? . . . Can it be really essential for satisfactory progress that such a distribution of losses and gains should continue, and is there any sufficient ground for placing the State in so false a financial relation to the construction of railways as that under which the former must bear all loss, and cannot possibly obtain a set-off by any gain? These questions.

* Railway Policy in India by H. Bell, page 92.

involve the discussion of the character of the agreements which have till now been entered into with companies for the construction of Railways in India, and the policy under which these works are entrusted to the companies in preference to being executed by the direct agency of the State."

He urged that the issue was whether the agency of the companies afforded any such special convenience or advantage to the State as to justify the Government in giving them terms which were alike unsatisfactory in a financial and administrative point of view, and that the only possible reply could be in the negative. He pointed out that the history, so far, of the operations of the Guaranteed companies had given illustrations of management as bad and as extravagant as anything which the worst of opponent of Government agency could suggest as likely to result from that system, and that the best conducted and the cheapest of these lines had been carried out entirely under departmental management, *i.e.*, without the intervention of contractors, in a way that, in short, differed in no respect from that which was followed on Government works under the Public Works Department. With reference to the Indian share of the work, he was satisfied that "under a reasonable system" the Government could at least secure as great ability to carry out the works, and with no greater outlay. The experience of twenty years under the guarantee system had shown, in the opinion of Lord Lawrence, that there was no reason to expect that the Government could derive any financial advantage in obtaining the capital for railways through the agency of companies, unless they could carry out the works and manage the lines very much more cheaply than could be done by the Government through its own agency. His own view was that the latter course would be the most economical to the State, and that the Government had already at its disposal a sufficient number of officers who were both qualified in railway work and in local experience; while he saw no adequate reason for supposing that if Government deliberately borrowed money for railway purposes

only, there need be any necessity for stopping operations on every occasion of financial difficulty.*

The despatch from the Government of India of the 15th March 1869 was practically based on Lord Lawrence's minute. They pointed out that it was no longer necessary to look to England for guidance in Railway construction; and that they might now with complete propriety claim the same degree of discretionary power in dealing with the administration and construction of Indian Railways as is exercised in relation to all other branches of the administration and all other classes of public works. They further urged that the proposal to make over the profitable or commercial lines to companies, and to leave the unprofitable or political lines to the State was unfair and unpracticable and concluded by saying that unless the necessary conditions, as regards economical construction and management, could be secured in arrangements with companies, it was desirable that in the future their agency should be altogether dispensed with for the construction of Indian railways.† The word construction included management and working also.

The Government of India addressed the Secretary of State again on this subject in their despatch No. 28 of 22nd March 1869, drawing attention more particularly to the serious liabilities which were being incurred by the State under the system of Guaranteed Companies; that the State was bound to pay a fixed rate of interest to the share-holders, whatever the cost of the line, or whatever the character of the management might be, and that while the Government only was seriously interested in securing economy, no substantial co-operation in this direction was to be hoped for from the companies. Attention was also drawn to a very serious phase of the companies' system, *viz.*, that the Government of India was losing its power of control over them, in so far that its decisions were not accepted as final in India, but were habitually referred to the Boards of Directors in London.

* "Railway Policy in India" by H. Bell, pages 94-95.

† *Ibid* page 97.

The position of companies was compared with that of Government in plain terms. It was urged that the former have only to supply the capital and to *receive* their interest from the Government, whatever be the outlay, and whatever be the results of the undertakings; while on the other hand, the Government had to *pay* the interest on the capital in full, and to be satisfied with the partial set-off derived from the net receipts. To the share-holders it was comparatively unimportant whether the first outlay was strictly confined to what was necessary or not. Their capital was an investment, the return from which was guaranteed under all circumstances; and even, in some cases, *wasteful outlay might be directly advantageous to them, as leading to the creation of a stock which might be sold at a premium.*[†]

The strong common sense of Lord Lawrence, his intimate knowledge of the country and its people, and a just appreciation of the value of the large body of engineers who were then carrying out public works under the Government, enabled him to make out an unassailable case against the Companies' railways and to banish for many a year a system which at the time seemed likely to press very severely on the revenues of the Empire. Dealing with the character of the control exercised by the Secretary of State over Indian Railway matters, he referred to the difficulties which must arise and had probably already developed owing to the undue influence of the India Office. He said—

"I am fully impressed with the propriety and even the necessity of placing in the hands of Secretary of State for India, the most complete control over the administration of India in all its branches, and I hope that nothing, I am now saying, will be considered as implying a desire to weaken that control. But the power exercised in England over affairs actually conducted in India, should surely be essentially one of control, and the initiation and practical direction of measures should as far as possible remain in the hands of Indian Government. I cannot think that it is conducive to good administration, to remove from the cognisance of the local authorities for the purpose of placing it in the hands of Secretary of State the principal management of transactions which already involve an

[†] "Railway Policy in India," pages 97-98.

outlay of 100 millions sterling, and most probably extend to double that sum, and which are entirely carried out in India, and at the charge of the Indian revenues. I must ask permission to state my opinion in plain language on this very important point, to the effect that the true interests of India demand that the Secretary of State's direct action in relation to Indian Railways should be exercised only so far as is essential for the prompt despatch of that part of the business connected with them which is necessarily carried out in England; and that beyond this his intervention should, as a rule, be limited to the control of the Indian authorities, on whom should be placed the same complete responsibility for railway management, both in respect to administration and finance, as is placed on them in all other branches of public business. I feel in the strongest manner that the real success in the economical and efficient management and extension of railways in India can only be attained by the frank adoption of this policy."*

In replying to the Government of India in July 1869 (Despatch No. 42 of 15th July 1869), the Secretary of State, then the Duke of Argyll, accepted their views. He said that whatever may have been the reason which had led to the introduction of the guaranteed system in India, the time had now evidently arrived when 'both in raising and in expending such additional capital as may be required for new lines in India, the Government should secure for itself the full benefit of the credit which it lends, and of the cheaper agencies which ought to be at its command.' In concluding his despatch the Duke of Argyll informed the Government of India that regarded as a whole the arrangements proposed appeared to him to be well adopted for providing in India gradually, regularly, and with all advisable rapidity a fairly complete national system of railway communication.† The Government of India set to work vigorously, organised a new railway branch of the Indian Public Works Department, into which were drafted most of the engineers then in Government service, who had railway experience in England; and to these were added others who were available from the

* Pages 20-21 of "Railway Policy in India" by Horace Bell.

† Page 23 of *Ibid.*

staffs of the Guaranteed companies, and a certain number of Royal Engineer Officers.*

The plan of State Railways was based upon the ground that expenditure would be kept more under control than when incurred through the agency of companies, that the cost of new lines would in consequence be much diminished, and that if India was formerly wanting in experience, she then possessed all the knowledge requisite in dealing with the administration and construction of railways. The Government also thought that a railway through an Indian State, where delicate negotiations might be necessary, was much better in the hands of Government than of a company. The notion of allotting commercial and remunerative lines to companies and of throwing upon Government the political and non-paying lines, did not meet with a favourable reception from the Government of India. Before the despatches upon this subject from the Government of India were received, the question of agency had engaged the attention of the Secretary of State also and he too had come to very much the same conclusions regarding it.†

As regards the lines which were to be undertaken, Lord Lawrence's proposal supported by Lord Mayo, was "that the construction of such a system of railways should be commenced as appeared likely to give a tolerably complete net work of main lines, traversing all parts of India, in which considerations of policy or the probable requirements of trade and internal convenience of the country, indicated the utility of opening such lines, and give sufficient grounds to anticipate the eventual growth of a traffic which would pay the interest on the cost of construction. The rate of progress was to depend upon the amount of capital upon which the Government could afford to pay interest out of the revenues. It was computed that 10,000 miles in addition to the 5,000 which were either open or in course of

*Page 24 of "Railway Policy in India."

† Para. 7, page 4 of the Government Director's Report on Railways in India for 1868-69.

construction, would provide necessary communication, through all the chief provinces; that by an annual expenditure of £3,750,000, 300 miles could be opened every year, supposing the cost was £12,000 per mile, and that thus in about 30 years all the requirements of India would be met, without either extraordinary taxation, inconvenient pressure on the public revenues, or objectionable increase of the liabilities of the State.*

The original papers in connection with the construction of the P. N. S. Railway were published at pages 245-303 of the Supplement to the *Gazette of India* dated February 19th 1870. In letter No. 544 R. dated 12th May 1869, Colonel R. Strachey R. E., Officiating Secretary to the Government of India P. W. D., wrote to the Joint-Secretary to the Government of Punjab in the P. W. D., Railway Branch, that "this Railway should be designed and carried out so as to ensure the smallest expenditure that will provide a thoroughly permanent and useful iron-road that can be traversed by the ordinary locomotive and wagon stock in use on the Punjab and East Indian Railways, at a low speed," and that "the principle to be followed should be to commence the line on the most economical scale possible, and to look to improvements being carried out by degrees in the future, as the traffic is developed and an amelioration of gradients and addition to the conveniences first provided are justified by increased returns." The Secretary of State for India agreeing with these views, desired that "the works may as far as possible, be so designed in the first instance as to admit readily of the future ameliorations and additions which may be found expedient."†

The staff of engineers began to arrive in India in November 1868, and it was determined that Jhelum, which it had been determined to maintain as a military station, "should be regarded as an obligatory point on the line, and that the formation of the Trunk Road should be occupied by the Railway,

* Para. 9, pages 4-5 of Government Director's Report for 1868-69.

† No. 72 dated 20th October 1869 to the Government of India, page 256 of the *Gazette*

if by so doing, any important reduction of the cost could be shown to be possible. By this decision the way was cleared for active progress on the section, 100 miles in length, between Lahore and Jhelum. One-half of the Trunk Road was accordingly taken for the railway embankment, except in the Kharian Hills, South of Jhelum, where a diversion was found necessary.

The Secretary of State for India subsequently directed that the Indus Valley Railway should be constructed on the Broad-gauge, leaving the gauge of the Punjab Northern Railway to the decision of the Government of India. The latter decided that this line should also be constructed on the Broad-gauge, the Metre-gauge railway which was then being laid on the Trunk Road was to be used as a temporary line as far as Wazirabad, pending completion of the embankment which was under construction in order to remove the line from the Trunk Road.†

Among the State Railways the first was the Calcutta and South-Eastern Line, 28 miles in length, the first portion of 15 miles of which was opened in 1862, and the remainder in 1863. It was purchased in 1868 from the guaranteed railway company bearing that name. Next, after this came the Nalhati State Railway, 27½ miles, opened in 1863. It was first constructed on the 4 feet gauge with 30 lbs. rails and was purchased from the Indian Branch Railway Company. They were followed by 8 miles of Khamgaon and 6 miles of the Amraoti State Railways, opened in 1870 and 1871 respectively. These are minor railways and very little known now. The first two are merged in the Eastern-Bengal System, while the latter two are worked by the G. I. P. Railway. The bigger State Railways did not come into existence till 1873, when the two sections of the Rajputana State Railway, on the Delhi and the Agra districts, were opened to traffic. The Punjab Northern was opened in 1875, and the Indus Valley in 1878; both these lines are the basis of the present North-Western Railway System.

† Government of India Resolution No. 1811-17 R, dated 3rd August 1874, page 1335 of the Supplement to the *Gazette of India* dated August 15th, 1874.

The total length of State lines, open on 31st. Décembre 1880, was 2931 $\frac{1}{2}$ miles as shown below, of which 2,186 $\frac{1}{2}$ miles were classed as Imperial and 745 $\frac{1}{2}$ miles as Provincial :—

<i>State Railways, Imperial</i>		<i>State Railways, Provincial</i>	
<i>5'-6" gauge.</i>		<i>5'-6" gauge.</i>	
Sindia	66 $\frac{1}{2}$	Patna-Gaya	57
Patri	22 $\frac{1}{2}$	Dildarnagar-Ghazipur ...	12
Dhond-Manmad	145 $\frac{1}{2}$	Amritsar Pathankot ... ..	...
Wardha Coal	46 $\frac{1}{2}$	Calcutta & South Eastern ...	28
Punjab-Northern	280	Nalhati (4 feet gauge) ...	27 $\frac{1}{2}$
Indus Valley	501	<i>Metre-gauge.</i>	
Kandhar	152	Northern-Bengal	243 $\frac{1}{2}$
<i>Metre-gauge.</i>		Tirhut	85
Rajputana	717 $\frac{1}{2}$	Muttra-Hathras	29
Western Rajputana, Hol-		Cawnpur-Farrukhabad ...	49 $\frac{1}{2}$
kar & Sindia Neemuch. 254 $\frac{1}{2}$		Nagpur-Chhattisgarh ...	53
		Rangoon & Irrawaddy	
	2,186 $\frac{1}{2}$	Valley	161 $\frac{1}{2}$

* Total State Railways 2,931 $\frac{1}{2}$

The military or strategical railways, are included in the North-Western Railway System administered by Government. The following are among such lines :—

<i>5'-6" gauge</i>	<i>Miles.</i>
Sind Sagar, Lala Musa to Shershah	341.76
Jand to Kohat	40.42
Kundian to Campbellpur	119.85
Sind-Pishin, from Ruk to Chaman <i>via</i> Sibi, Sharigh and Bostan	336.75
Mushkaf Bolan from Sibi to Quetta	86.74
Quetta to Bostan	20.57
Quetta to Nushki <i>via</i> Spezand	82.66
Peshawar-Jamrud	11.04
<i>2'-6" gauge</i>	
Kohat to Thall	61.75
Nowshera to Dargai	40.25
Total	1,141.79

Having decided in 1869 that future railway extensions should be carried out directly by the State, no action was taken by the Government for the next ten years in any other direction, and Companies' operations were restricted to the lines already constructed by them. During the years 1874 and 1879 the country was visited by a succession of most serious and wide-spread famines, which coupled with the troubles created by the Afghan War of 1878-79, brought in financial difficulties which greatly checked the progress of the State Railways.

The State Railways belong to the Government of India. They have been either constructed by the direct agency of Government or acquired from Companies. Some of them are worked now by the direct agency of the Government, while the working of others has been entrusted to British Companies and in one case to the administration of Indian States. The State Railways may be classified as follows:—

- (a) Surrendered by Companies as unprofitable and taken over by Government;
- (b) Constructed and worked by Government;
- (c) Purchased by Government from companies but leased to latter for working;
- (d) Constructed by Government, but after successful working leased to companies for subsequent working;
- (e) Constructed and worked through the agency of companies;
- (f) Acquired from companies and worked by Government.

See diagram I in Appendix 15.

Almost all the State Railways are now classed as Imperial; only one short line of 32½ miles being classed as Provincial, which is worked by the Assam Provincial Government. A number of railways were formerly under the Provincial Governments, but they have been since merged into the Imperial State Railways.

SECTION 2.—Provincial State Railways.

The Provincial Railways were provided under arrangements made by the Government of India, delegating to Local Governments financial responsibility and administrative authority in regard to Provincial Productive Public Works. The rules framed for permitting Local Governments to raise Provincial loans for the construction of such productive public works were submitted by the Government of India with their letter No. 186, dated 2nd May 1878 to the Secretary of State, who conveyed his cordial* concurrence in the policy of interesting native land-owners and capitalists in the development of the resources of the country, and in the *management of works* constructed for the purpose of benefitting the neighbourhood of the places in which their property is situated. The rules provided that upon a Provincial Government undertaking financial responsibility for the work, the construction and management would be delegated entirely to the Provincial Government, subject only to a general control on the part of the Central Government. The Local Governments were also to be permitted to raise Provincial debenture loans for such works. The Government of the North West Provinces were accordingly authorized to take action for the construction of the Cawnpur-Farrukhabad Railway as a famine relief work, and the Lieutenant-Governor of Bengal in the case of the Patna-Gaya Railway. The debenture loan formed part of the registered public debt of India and the debentures ran in the name of the Secretary of State-in-Council for India, resembling the general debenture debt of the Indian Government. The chief point in which they differed were that the interest was not payable within a certain distance of the Presidency towns, and that, if the net receipt of the work proved more than sufficient to pay 4 per cent. interest on the debentures and $4\frac{1}{2}$ per cent. on money advanced by the Government, they gave to the holder a right to share with the Government in the surplus profits.

* Secretary of State's despatch dated 31st July 1878, pages 67-68 of the Report of Select Committee of 1879.

The Secretary of State added that he was not satisfied of the necessity of resorting, for the purposes of these works, to the plan of Government guarantee, which had been admitted to be no longer generally suitable to the circumstances of the country. At all events, he desired, in the first instance, to try the experiment of raising local capital on the exclusive security of the success of the works, giving to the subscribers every possible interest in the management, and every inducement to economical administration. Not until this had been shown to be impracticable, would he have recourse to a system of guarantee, *which was then "wholly abandoned in respect to Imperial works."*

It is a matter of regret that the Government have not yet given effect to the policy ordered in 1878, of interesting Indian land-owners and capitalists in the management of railways. The time has come now that Indians will themselves take up this matter seriously and have the whole administrative machinery of Indian railways set in order. The Local Governments ought to have control over all the railways within their own territories and representatives of the people should be allowed to take part in the direction of the railway administration, as suggested in Section 1 of chapter II, pages 113—116.

SECTION 3.—Financial Policy of Government.

Under the contracts with the late Guaranteed companies, who had the sole charge of railway operations in India from 1849 to 1867, the cost of constructing the railways was provided by the companies, and the same did not appear in the revenue and expenditure accounts of India. The Government of India had only to bear the cost of land and supervision, loss by exchange and the guaranteed interest less net traffic receipts. These charges were paid out of the general revenues of India. The working results of those companies were not financially remunerative, except in the year 1877-78, and the State was obliged to furnish large sums of money to meet the difference between the net receipts and the interest due on the capital raised.

Reviewing the actual results upto the end of 1868, Lord Lawrence gave the following facts and figures in para. 29 of his famous minute* dated 9th January 1869:—

The total capital expended to the end of 1868 was about 78 millions (sterling);

In the first five years, including 1854, the aggregate outlay was $3\frac{1}{2}$ millions, and since then the average had been say, five millions yearly;

Of the above sums, about two-fifths was spent in England, and three-fifths in India;

The average number of miles opened to the end of 1860 was 120 yearly, omitting the first-four years in which no line was opened; since that time, about 400 miles yearly; the total length open in January 1869 being nearly 4,000 miles. The general average on the 15 years was 270 miles yearly;

The aggregate net receipts in fifteen years, from 1854 to 1868, might be called 12 millions, and the gross payments on account of guaranteed interest $25\frac{1}{2}$ millions, leaving a net charge of about $13\frac{1}{2}$ millions;

The average estimated cost per mile of railway under guarantee was £17,000.

In para. 28 of the same minute his Lordship thought that it would be quite reasonable to assign two millions as the yearly sum to be appropriated from the Indian revenues "to promote railway construction in the future," basing this on the actual figures for the previous eight years, where the guaranteed interest varied from $1\frac{1}{2}$ to $1\frac{1}{4}$ millions, and the loss by exchange, land and supervision about half a million yearly.

The origin of the State Railway policy was described by Mr. Henry Waterfield in his evidence before the Select Committee of 1884, from which we give here the interesting matter concerning the financial policy. In connection with a balance of £3,000,000 which had accumulated in consequence of a loan raised

* Page 337 of Parliamentary Report 333 of Select Committee of 1878.

in England in 1861 to meet the demands of the Guaranteed Railway Companies, and the remittances from India having been reduced in anticipation of famine, the Secretary of State, Sir Charles Wood, in 1862 urged on the Government of India the importance of using its surplus balances in the construction of canals and roads, but he forbade their application to works not likely to prove remunerative. In 1866 Lord Cranborne adopted a similarly view and sanctioned a loan of 70 lakhs for public works. Such works were treated as "Extraordinary" and from the year 1867-68 the first separation of the Extraordinary works from the ordinary ones appeared in the Indian accounts.*

In January 1868, after many proposals for the extension of railways had been received from India, Sir Stafford Northcote informed the Government of India that important lines which were to be made for political reasons should not be allowed to weigh heavily on the railway market, and he therefore suggested that a limit of annual charge on the revenues on railway account should be fixed, under which as the revenues were relieved of charge by old lines becoming self-supporting, new ones might be taken in their place.†

In January 1869 the Government of India (Under Lord Mayo), concurring in the policy formulated by Lord Lawrence, proposed a large scheme for the extension of public works by loans amounting to six or eight millions a year for the next ten years, which they proposed to raise in India or in England, which might, from time to time, afford the cheapest market. In replying in March 1869, the Duke of Argyll stated that—

"As a general principle when a loan is required, it is desirable that it should be obtained in India, if it can be done on terms nearly as favourable as in England; and it is difficult to decide what additional interest would be counter-balanced by the advantages which otherwise attach to loans raised in India. It is only when loans are obtained in India that the native capitalists subscribe to them, and that is a very important consideration. Moreover when loans are raised in England, the interest must be paid here; and this adds to the very large sum (above 13 millions),

* Report of the Select Committee of 1864, paras. 6030-31, page 387.

† Ditto. Ditto.

para. 6032, page 387.

which must be remitted annually to meet the disbursement in this country, and which must increase so long as payments are made into the Home Treasury by the Railway Companies."

And after quoting the prices of the 4 per cent. securities which in India were 94½ and in London 102½ per cent., he added—

"Having regard to the comparatively little difference in the value of securities in India and in England thus shown to the political advantage which attends borrowing in India, and to the fact that the interest of such loans is paid without the inconvenience or risk of remittance, it appears to be desirable that you should obtain in India as large a portion as practicable of any loans which may be required."

He declined to "accede to any proposition for borrowing a specific amount in the next five or six years."*

As regards railway extension in particular, the views held by Lord Mayo's Government in 1869 were described by Mr. Henry Waterfield in the following terms:—

"As regards the agency, they held that the time had arrived when both in raising and in expending the additional capital required for new lines, the Government should secure for itself the full benefit of its credit and of the cheaper agencies at its command. If guarantees should be granted to any new companies, they urged the importance of giving power to the Government to take over the works from the Companies in the event of their not being carried on to the satisfaction of the Government, and of providing that the net profits above the guaranteed rate of interest should be for ever divided equally between the Government and the Companies"†

The Duke of Argyll concurred with the Government of India and specially pressed on them the necessity of giving full attention to the view expressed by Lord Lawrence, "that the financial success of a railway depends as much on the limitation of its cost as on the magnitude of its traffic, and that whether Government agency be employed or not, too much attention cannot be paid to economy in construction, to the selection of lines not involving heavy works, and to the careful avoidance of all expenditure not absolutely required for the stability of the works, or the accommodation of the traffic."

* Report of Select Committee of 1884, para. 6034 page 387.

† Ditto. Ditto. para. 6035 „ 388.

At that time (1868) any works sanctioned as extraordinary were permitted to be constructed from borrowed money or surplus balances. The attention of Parliament was attracted to the matter and a Select Committee on Indian finance sat from 1871 to 1884, examined several witnesses on the subject, but they made no report thereon.*

The most distinct enunciation of opinion on the part of the authorities in England was a Despatch of Lord Salisbury dated 23rd July 1874, in which three distinct principles were laid down definitely:—

First.—That no works were to be constructed with loans, except those likely to be remunerative by yielding in the shape of annual income a sum equal to the interest on the money expended on their construction, including interest during construction.

Second.—That famine preventive works might be made out of revenue of the year, but if that proved insufficient, recourse might be made to borrowing.

Third.—That all loans for public works be raised in India, it being inexpedient to increase the home charges in England.†

Select Committee of 1878-1879.

On 22nd January 1878, a Select Committee of the House of Commons was appointed to enquire into and report as to the expediency of constructing Public Works in India with money raised on loan, both as regards financial results and the prevention of famine. The Committee held eighteen meetings between 1st March and 1st August 1878, examined twelve witnesses upon the subject referred to them; but as it was not in their power to conclude their investigation in that session, they agreed to report to the House the evidence which they had taken, and

*Report of the Select Committee of 1884, para. 6038, page 388.

† Ditto. Ditto. of 1879, pages xvii & 72.

they recommended "that the Committee be reappointed in the next session of Parliament." On the 19th February 1879, the Committee was reappointed. They held six meetings between 24th February and 15th May 1879, examined three more witnesses and made their Report on the 24th July 1879. The Committee consisted of seventeen members of Parliament and Lord George Hamilton was its Chairman.

In the following paragraphs, we note certain facts embodied in the above Report and the recommendations made by the Committee:—

When the State undertook the construction of Railways through its own agency, the capital annually so expended was classed as Extraordinary Expenditure, but though placed outside the ordinary expenditure, was charged against the revenue on the understanding that, if the revenue was unable to meet this charge, the funds might be obtained by borrowing. The Select Committee, however, recommended that all such expenditure might be treated as borrowed money, on the ground that "any surplus which, but for this charge, would have been shown in the ordinary account of a particular year, might have been applied to the reduction of existing liabilities," and that a separation of the capital account into two parts "one bearing and the other not bearing interest, would make the real cost or profit of such works to the State a matter almost beyond the possibility of calculation."* According to this recommendation, the outlay on Preliminary expenses on Surveys, etc, and on the construction of certain classes of railways, *viz*:—

Famine Fund Railways,

Frontier Railways,

Other Protective railways,

which has been met from the general revenues of India is recorded separately and treated as a part of the Capital Expenditure on State Railways; the expenditure on the Construction of Pro-

* Pages v and vi of the Report of the Select Committee of 1879.

ductive or Commercial Railways, which has been met from borrowed funds, is distinctly recorded against Head "N,—Not charged to Revenue."

In 1876 the Government of India wrote in a letter to the Secretary of State that "The principle by which our expenditure upon 'extraordinary' public works has been guided is, that however advantageous the extension of rail-roads or irrigation works may be, it would not be right to carry them on, at such a rate as would require the imposition of fresh taxes." The rate of expenditure, they added, had accordingly been regulated by calculations which were given in detail in the forecast of 1873 and 1875. The calculations showed that any additional interest on account of money borrowed for the purposes of constructing 'extraordinary' works, would be met from similar works which had been or would, from time to time, be completed and brought into operation . . . †

During the financial year 1878-79, however, additional taxation was imposed in India, in order to establish an Annual Famine Insurance Fund of £1,500,000. That amount was fixed with reference to the famine expenditure which during the previous six years had amounted to the enormous sum (excluding loss of revenue) of £14,487,827,* of which a very large portion had been met by borrowing. The object, therefore, of this Famine Insurance Fund was, by increasing the revenue to avoid the constant additions to the debt of India which the prevention of periodical famines would entail, by either applying that increase of income to works likely to avert famine, and thus obviate famine expenditure, or by reducing annually debt contracted for famine, so that if famine expenditure should again become inevitable, the reduction of debt made in years of prosperity would compensate for the liabilities incurred during scarcity. This increase of taxation was sanctioned by the Secretary of State in Council, on this understanding:

* Page xviii of the Report of the Select Committee of 1879.

† For details see page 694 of Report of Select Committee of 1884.

In September 1878, the authorities in England received a despatch from the Indian Government, adverting to the difficulty of discriminating between works strictly productive, and those (protective) only admissible as providing against the effect of famine, and proposing "to accept a yearly maximum dead weight charge, to be fixed, as experience may suggest for works constructed in order to prevent famine, or give protection from famine, or diminish the expenditure for the counteraction of famine, if it occurs." In other words, they "would limit to a specific maximum amount the net expenditure for the interest on capital cost of all such works and their maintenance, after setting off all the net income yielded by the works." In addition to the annual loss entailed by "their net existing liabilities," they proposed to add an annual sum not exceeding 25 lakhs of rupees, and they thought that that amount might form a primary charge upon the Famine Insurance Fund "on the consideration that the construction of any works not fully productive, according to the existing definition, which may be thus facilitated, will cause an equivalent reduction of the ultimate liability on account of famines when they occur."

The latter part of the above suggestion by which it was proposed to permanently assign 25 lakhs of rupees of the Famine Insurance Fund, in order to raise money for the construction of famine works, not fully productive, was considered to be an entire inversion of the object for which the fund was raised. The increase of taxation was justified as necessary in order to meet, as far as was possible, famine expenditure for the future out of income; but to immediately appropriate a portion of the income so raised to pay the interest of new loans was a proposal which, in the opinion of the Select Committee, the Secretary of State in Council had no option but to reject.*

But the principle question was how to check and regulate capital expenditure, year by year, upon new lines of railway. In

* Report of the Select Committee on East India Public Works 1879, pages xviii—xix.

the opinion of the Select Committee the whole of the expenditure upon productive public works, being treated as capital outlay to be met by borrowing, rendered it apparently possible to adopt a permanent system of control, either by annually limiting the capital expenditure itself, or else, as suggested by the Government of India, by limiting to a specific maximum amount the net expenditure for the interest on the capital cost of all such works and their maintenance after setting off all the net income yielded by the works," and within the limits allowing the contracting of capital liabilities. Taking the last proposal first, the Select Committee made the following observations :—

"The general result of the expenditure upon works classed as productive so far as at present can be ascertained, has placed an annual but varying loss upon the revenues of India. The proposal of the Government of India, last September (1878), was to accept for five years as a dead weight upon Indian revenues this loss, adding to it 25 lakhs of rupees to pay for the interest of sums raised for new famine protective works. In other words, their proposal would have ultimately placed at the disposal of the Public Works Department an income composed of—

First.—The receipts from these works;

Second.—A fixed sum termed by Government of India 'dead weight,' sufficient to establish an equilibrium between the income derived from, and current expenditure connected with, these works; and

Third.—25 lakhs of rupees.

Provided, therefore, the interest on the sums borrowed did not exceed the aggregate of this income, works might be constructed to any extent."

For two reasons the committee could not accept these suggestions—

"First, because the adoption of such a plan would be the admission of the principle that works, sanctioned and constructed as remunerative, might afterwards be accepted as a permanent charge upon the revenues of India; and, secondly because the scheme affords no check whatever to the possible and ultimate amount of that charge."

*Page xx of Report of Select Committee of 1879.

For limiting the amount to be annually spent on construction of railways, the Committee made the following observations:—

“As the capital account of productive works annually increases, every year's increase means a larger sum of interest to be paid, and a larger charge for maintaining and managing works in operation. Unless, therefore, the development of revenue from these works is proportionately progressive, the amount of “dead weight” cannot remain stationary, but will annually vary, being dependent upon the amount of the receipts from the works to which it refers. But these receipts greatly fluctuate, especially during years of famine.” . . . “So far, therefore, from the plan in question affording any data in which an opinion could be formed as to undertaking new works, propositions for new works made after a year of comparatively good financial results might be sanctioned, which would be rejected if the results of the same year had been unfavourable, and thus, instead of the determination of the Government being guided by the prospect in regard to the works proposed to be undertaken, it would be influenced by the favourable or unfavourable result in the most recent year of works long previously commenced, and wholly or partially completed. It is futile, therefore, to attempt to control capital expenditure by assigning a certain sum out of revenues of India as the limit beyond which no liability is to be incurred, unless the receipts or revenue to which this sum is added can be equally regulated and estimated. As this cannot be done, this and any other method of control based upon this principle may be dismissed from consideration. The only other practicable check is to limit the amount of the annual capital outlay.”

The Committee after careful consideration made the following recommendations:—

“That the construction of new works, from borrowed money, for the future be limited to those schemes alone, which upon the responsibility of the Government, are estimated to be productive, by yielding an annual income, equal to the interest on the capital, expended in their construction, including in such capital, interest during construction.

That the amount to be annually expended upon productive public works should mainly depend upon the financial condition of India, and should, therefore, for the present, be limited to an amount of 2,500,000/ as recently fixed by the Secretary of State for India in Council.

That in furtherance of the above recommendations 2,500,000/ should be the maximum amount to be raised in any one year by the Indian Government (in addition to the existing liabilities) for the prosecution of productive public works.

That the debt incurred for productive public works be kept separate from the permanent or general debt of India.

That all expenditure on the construction of productive public works should be treated as borrowed money, so that, if instead of borrowing to the full extent of such expenditure, a part of the surplus revenue of the year can be devoted to this purpose, the general debt of India be treated as relieved, and the productive public works debt as increased to such extent.

That if in any year the financial condition of India should admit of any increase in the expenditure on productive public works by devoting to that purpose surplus revenue, care should be taken that the permanent establishments be not so increased as to prove burdensome in years less generally prosperous.

That the accounts of the Public Works and Financial Departments be reconciled, so that in future there may be only one accepted official account relative to Productive Public Works.

That a full statement of the income derived from, and expenditure (both current and capital) upon these works, form an integral part of the Annual Financial Statement of the Government of India."

'The danger of raising fresh loans in India,' added the Committee, 'will diminish in proportion as the contribution from the general revenue of India for the payment of the interest due upon them decreases. If, year by year, this amount diminishes, and year by year the public works receipts increase, such a confidence will be established in the productiveness of these works as may induce local authorities or private individuals to undertake them without a guarantee or concession.'*

The difficulties of the previous six years had been abnormal, the famine expenditure in India having at times so depleted the

* Pages xxi and xxii of Report of Select Committee of 1879.

cash balances as to render them insufficient to meet the drafts of the Secretary of State, which the exchange difficulties prevented the Secretary of State, at other times, from obtaining purchasers for his drafts upon India, although there were the requisite funds in the treasuries in India. The Committee, while making allowance for these difficulties, were clearly of opinion that *loans for public works in India should always be raised in India*, unless the Secretary of State in Council should be satisfied that the difference between the rates of interest in England and India is so considerable as to afford full compensation for the disadvantages which inevitably attend borrowing in this country (England). And they concurred in the communication of the Secretary of State to the Viceroy, in which he requested that, whenever it is possible, a certain proportion of Famine Insurance Fund should be remitted to England, and applied to investment in, and thus to the reduction of the debt raised in London for Famine expenditure.

The italics are ours. The committee were also of opinion that "greater opportunities should be afforded to natives in the interior of the country to subscribe in small sums to the loans of the Indian Government."†

SECTION 4.—Famine Insurance Fund.

In December 1877 the Government of India finding their finances deranged by the heavy charge for the relief of famine, made a somewhat rough estimate that on an average £15,000,000 would have to be disbursed on this account in every ten years, and accordingly they resolved to improve the annual resources to the extent of £1,500,000, partly by a readjustment or reduction of expenditure, and partly by the imposition of new taxes. They proposed to reduce their annual borrowings by £1,500,000 and to allot that sum from the revenues for the productive works, and they considered that, with the receipts of new works to aid them, the revenue of the several Provincial Governments would admit of their paying interest on the whole capital outlay.*

† Page xxii of Report of the Select Committee of 1879.

* Para. 6046 of Evidence before the Select Committee 1884.

Lord Salisbury sanctioned the provision of £1,500,000 annually for famine insurance, but he considered that, as in time of pressure from famine the money could not be obtained in the local market, and must be borrowed in London, it was necessary that the famine insurance money should be annually applied to the repayment of debt in England; otherwise the scheme would result in money being practically borrowed in London for productive works, which was opposed to the standing instructions.*

Accordingly provision was made for what were described as Protective Works, i.e., Works not necessarily directly remunerative but calculated to prevent the occurrence of famine, to give protection against it, or to diminish the expenditure in its relief when it occurred.

Lord Cranbrook would not at first allow the receipts from Famine Insurance to be directed from their primary purpose of cancelling debt in England. Sir John Strachey, however, who was on a visit to England at the time, having personally explained the scheme and urged the importance of making some distinct provision for the protective lines contemplated in Bundelkhund and similar tracts, it was (in modification of Lord Salisbury's order that the whole £1,500,000 should be applied to the repayment of debt in England) agreed in 1879 that, after appropriating £750,000 to the repayment of debt in England, the remainder of the famine insurance money might be used by the Government of India as they should think fit in the relief of famine, the extinction of debt or the construction of protective works, i.e., £750,000 should be applied to the reduction of debt and £750,000 to the construction of works which should protect the country against famine.*

So far there were three phases of the Famine Insurance arrangements. Lord Salisbury in 1878 required the whole of the £1,500,000 to be annually devoted to the repayment of sterling debt. Lord Cranbrook in 1879 reduced the sum to

* Paras. 6047, 6050-51 of Evidence before Select Committee 1884.

£750,000 and allowed the other moiety to be employed at the discretion of the Government of India in famine relief, extinction of debt, or prosecution of protective works. And finally, in 1881, Lord Hartington permitted the protective works to have the first moiety, leaving the other to be divided between famine relief and extinction of debt. The Famine Insurance Fund was started about the year 1878-79.* The famine policy was first laid down by Sir John Strachey in the Financial Statement for March 1878, and explained by him in his speech in the Legislative Council on the 9th February 1878.†

Lord Cranbrook's despatch‡ No. 26-F, dated 20th February 1879, explained the matter as it stood up to that date.—

The cost of the famines was estimated on an average of years, at about £1,500,000 per annum and a provision was made for meeting this expenditure by measures of Financial decentralization and by new taxation. 'The Government of India,' said Sir John Strachey, 'intends to keep this million and a half as an insurance against famine alone; we consider that the estimates of every year ought to make provision for religiously applying the sum I have mentioned to this sole purpose; and I hope that no desire to carry out any administrative improvement however urgent, or any fiscal reform however wise, will tempt the Government to neglect this sacred trust.' (para. 7 of the despatch).

"The first claim on these receipts being that of the Home Government for the repayment of debt already incurred on account of famine. I am of opinion," wrote Lord Cranbrook, "that not less than one-half or say £750,000, should be held available for remittance to England in the next and ensuing years on that account. The remainder may be appropriated at your discretion, to the extinction of debt, to the relief of famine, or to the construction of protective works, not necessarily directly remunerative, but obviously productive in the sense of guarding against a probable future outlay in the relief of population. I cannot, however, under present circumstances, sanction the raising of capital by loan for the construction of works which do not distinctly fall under the regulations laid down for Productive Public Works." (para. 18).

* Para. 6136 of evidence before Select Committee 1884.

† Para. 4744 of ditto:

‡ Pages 69-72 of Report of the Select Committee of 1879.

SECTION 5.—Financial Results.

The yearly results of working of the State Railways are shown in Appendix No. 7. They are summed-up as under:—

Period.	Thousands of rupees.		
	Gross Receipts.	Charges.	Profit+ or Loss—.
1868-69 to 1882-83	26,20,25	27,10,49	— 90,24
1883-84 to 1889-90	73,73,55	74,77,79	— 1,04,24
1890-91 to 1899-00	1,77,79,77	1,81,26,19	— 3,46,42
1900-01 to 1904-05	1,48,26,84	1,39,55,99	+ 8,70,85
1905-06 to 1909-10	1,98,77,72	1,89,19,33	+ 9,58,39
1910-11 to 1917-18	4,50,95,22	3,91,75,17	+ 59,20,05
1918-19 ...	76,25,70	60,09,06	+ 16,16,64
1919-20 ...	79,02,65	69,25,56	+ 9,77,09
Total ...	12,31,01,70	11,32,99,58	+ 98,02,12

From the commencement to the year 1879-80, there was a net loss. In 1879-80 the East Indian Railway became a State line and the other State lines also showed a steady improvement in their net earnings, with the result that there was a net profit from 1879-80 to 1885-86. After that, the large capital outlay on new lines on the extensive programme, sanctioned in 1884, increased the interest and other charges, so that the net result showed losses continually from 1886-87 to 1898-99, except during the year 1891-92. As the traffic on the new lines developed, there was a marked improvement in the financial results, and we find profits increasing steadily, from Rs. 1,12,07,000 in 1899-1900, to Rs. 3,39,84,000 in 1904-05, to Rs. 5,71,35,000 in 1911-12, to Rs. 11,47,05,000 in 1916-17 and to Rs. 16,16,64,000 in 1918-19. The results during the last few years were exceptional, as, for want of English material which could not be obtained on account of the war, the work of renewals of rolling-stock, permanent-way, etc. had been suspended and the revenue expenditure largely curtailed, leaving undue balances of net

earnings and net profits. The net profits from the State Railways during the present century have substantially made up much of the loss incurred through the old Guaranteed railways.

Among the lines worked by the State, the North-Western Railway is the most important. It consists of a Commercial Section and a Military Section. The traffic returns of the latter, 1,285 miles, are very low; it is worked at a loss. While the 4,035 miles of the Commercial Section gave the following percentages of net earnings on its total Capital outlay:—

1915-16	5.50 per cent.	1918-19	8.04 per cent.
1916-17	7.21 "	1919-20	6.38 "
1917-18	9.50 "		

The Eastern-Bengal was 621 miles on the Broad-gauge and 1,117 miles on the Metre-gauge on 31st March 1920. Its net earnings gave the following percentages on the Capital outlay:—

	Broad-gauge.	Metre-gauge.
1915-16	4.04	3.67
1916-17	4.34	5.25
1917-18	3.57	5.08
1918-19	4.09	5.11
1919-20	2.87	5.96

The Oudh and Rohilkhand Railway had 1,624 miles open on 31st March 1920. The percentage of net earnings on the Capital outlay was—

1915-16	5.28	1918-19	8.98
1916-17	7.02	1919-20	6.29
1917-18	8.21		

Taking the State Railways worked by the Companies, the percentages of their net earnings on their Capital outlay, during the five years of their *latest* working, were as under:—

5'-6" gauge.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.
B. N. ...	5.56	6.51	7.30	7.48	6.10
B. B. & C. I. ...	7.69	8.96	9.69	11.13	9.05
E. I. ...	8.96	9.60	10.54	11.90	9.30
G. I. P. ...	5.98	6.90	7.45	7.63	7.03
M. & S. M. ...	6.73	7.98	9.62	9.78	8.30
S. I. ...	6.19	6.87	8.97	9.40	8.05

<i>Metre-gauge.</i>	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.
Assam-Bengal ...	0.94	0.90	1.08	1.15	1.29
B. B. & C. I. ...	9.51	10.63	10.75	12.86	9.62
Burma ...	4.23	5.48	5.31	6.27	6.65
M. & S. M. ...	5.08	5.46	6.92	6.67	6.62
S. I. ...	8.16	8.87	10.35	9.95	9.49

The efficiency of Railway Administration is, however, not to be judged upon these statistics, but from the actual satisfaction given by the service rendered to the public. The best-worked *State* line will give a maximum of service with costs just to cover the expenses. High profits mean a tax on transit, and an efficient administration will not aim at high profits but at a thoroughly satisfactory service. Moreover, railway earnings depend upon the volume of traffic available, and costs of working vary according to the prices of coal, other consumable stores and labour. A large amount of traffic brings down the costs of working; while the smaller the traffic the larger is the cost of its working. All these factors have to be considered in the various localities in judging the efficiency of railway working. The expenses are also influenced by high gradients (ascents and descents) of the rail-road, steady up and down traffic, judicious use of rolling-stock, etc., etc. An efficient administration will create new traffic by attractive means to induce travellers and by fostering local industries. Local bodies can also attract travellers by founding museums, exhibitions, and other Institutions of general interest and amusement.

G. I. P. Ry.—During the first 14 years, after the purchase of the line by the State in 1900, the working of the G. I. P. Company showed losses of Rs. 2,15,18,647 in 12 years, and profits of Rs. 79,09,912 in the other two years.

The Assam-Bengal Railway is a losing concern. It expended a capital outlay of 18.69 crores of rupees, upon which the State has paid another 8 crores or more in the way of interest not covered by the net earnings, from 1895 to 31st March 1920. A thoughtful writer in the *Bombay Chronicle* of 9th April 1921, described this line in the following terms:—

'The Planters' line—a White Elephant.

"This railway was built for the planters, in a region where river transport is available and cheaper. Consequently the road has ever since its inception been nothing but a source of loss. Not only this, the line has a hill section subject to constant damage by floods and the expense of up-keep is prohibitive. Notwithstanding all this, the road has been allowed to expand and prey on State revenues as it pleases. Throughout the greater part of this line, there is very little passenger or freight traffic. The area traversed is sparsely populated and is hilly. Besides, the Brahmaputra is navigable and affords ample and cheap transit. This railway is worked under a guarantee and is a great loss to the State. In the nineteen years ending 1913-14, there was not a single year in which there was a profit, and the *total loss*, on revenue account, amounted to *six and a quarter crores*. In the three years ending 1916-17, a *further loss* of nearly 110 lakhs was sustained. Meanwhile the capital outlay increases merrily. In 1895 it was $4\frac{1}{2}$ crores, in 1900 it was ten, in 1910 it was $14\frac{1}{2}$, and in 1916-17 it was $16\frac{3}{4}$ crores. The Company's share capital is $\text{£}11\frac{1}{2}$ millions and the State guarantees three per cent. interest thereon. As the Railway Company gets the interest, though the road does not pay its way, and derives all the benefits, direct and indirect, of management, it clamours for extensions and ambitious projects.

'Development' of Refined Plunder.

Not satisfied with this, the Company has been clamouring to develop the port of Chittagong—a port that cannot pay expenses, as nobody wants this port except the Planters and the Railway Company—in the wonderful way, in which it has "developed" the railway. As the policy of the Government has been to assist the exploiters at the expense of the tax-payer and against the country's interests, it is likely that the State will grant large sums to the Company, public opinion should forcibly assert itself and oppose any such step. There is no reason why this small road of about eight hundred * miles should be burdened with the

* 1020. 90 miles in 1913—20.

costly paraphernalia of a big Railway system—a London Board, office, etc., an Indian agency, etc. What should be done to prevent this waste is this: The capital account should at once be closed; all new construction should be given up as well as the Chittagong port project: the hill section should be scrapped and abandoned and the northern and southern sections should be given to the E. B. Railway for working as part of that system. In one word the A. B. Railway must go, and at once, if the country is not to be saddled with further losses. 'Private enterprise,' and 'Company' management, indeed! This is neither 'enterprise' nor 'management,' but only a policy of *refined plunder*, that masquerades under fine catchwords and needs ruthless exposure.—S. V. DORASWAMI."

This company was formed in April 1892 to take over the Assam-Bengal State Railway, the construction of which had been begun in 1891. The company took it over in October 1892. It includes also the Noakhali Railway which was surrendered as unprofitable in 1905 by another Company. It has a guarantee of 3 per cent. on its capital, on condition that the Company's share of capital is not less than $\frac{1}{11}$ ths of the total capital expenditure. On 31st March 1920, the total capital outlay on this Railway was Rs. 18,69,08,000 = £12,460,533, of this £1,500,000 was share capital and £3,155,900 debentures raised by the company. The share capital was only about $\frac{1}{11}$ th instead of $\frac{1}{11}$ ths required under the contract.

Mr. T. Robertson, in para. 21 of his Report of 1903, drew attention to the unsatisfactory terms of the contract of this company and to the unsatisfactory results of its working. He remarked that "there is not the same reason for keeping down either capital or revenue expenditure as would exist if the company's dividends in any degree depended upon economy of management." The remarks of Mr. Doraswami are very pertinent and we draw particular attention of the Legislative Assembly and the Council of State to the same. The results of this railway have violated the five years' limit, during which a railway should clear the interest charges.

CHAPTER V.

Indian State Railways.*

THE first mention of an Indian State Railway was made in the Annual Report on the Railways in India for the year 1860-61, page 15. There Mr. (afterwards Sir) Juland Danvers, wrote that a scheme had been brought forward "for introducing a line of railways into the Guicowar's territory, in connection with the Bombay and Baroda Railway" and that "the Government of Bombay was authorized to assist the Guicowar in carrying out his design, by giving him the benefit of the experience in railway matters which that Government had gained, interfering only with the construction so as to secure an uniform gauge and providing for the conveyance of troops and mails when necessary." Since then, His Highness the Maharaja Gaekwar has taken a keen interest in providing a net-work of railways in his territory. A complete list of the lines is given in Appendix XII.

In the early sixties the railway field in India was entirely in the possession of the old Guaranteed Companies. Along with the introduction of the system of the State Railways in the British territory, however, the same system was adopted by the principal Indian States also. Survey orders were given in 1869 for the following railways:—

Khamgaon and Amraoti in Berar.

Miyagaon to Dabhoi in Baroda.

Wadi to Hyderabad in Deccan.

The Mysore State followed in 1870. Khamgaon and Amraoti State Railways, opened on 4th March 1870 and 16th February 1871 respectively, were constructed from the surplus revenues of Berar (Hyderabad Assigned Districts) and originally treated as

*The term "Indian State Railways" here applies to railways provided by the Princes of India. In some places it has been used for the State Railways belonging to the British Indian State.

"Native State Railways."† These lines are now included in the State Railway system leased to the Great Indian Peninsula Railway Company for working purposes. The first working agreement for these lines was recorded as appendix "S," page lx xvi of the Administration Report for 1881-82.

The Government of India, in their No. 40 dated 29th March 1970, were "greatly gratified to be able to inform" the Secretary of State for India "of the highly satisfactory conclusions made with two important Indian States relating to the extension of Railways."

The first of these was a line from Wadi on the Great Indian Peninsula Railway to Hyderabad. This line was originally intended to be built by the British Government as a State Railway, expecting the Nizam's Government to bear at least one-half of the cost of construction; but when the Government of India invited the Nizam's Government to consider the terms on which the needful funds could be supplied, His Highness the late Sir Salar Jung proposed "that the Nizam's Government shall provide the whole of the capital required, partly from the means of the Hyderabad State, partly by aid of subscriptions of local capitalists," the whole estimated cost amounting "to about one million sterling." The railway it was "considered to be the property of the Hyderabad State, and the profits of the working" were to "go entirely to that State. But the construction, management and working of the railway" were to be "carried on exclusively by the British Government under the general supervision of the Resident at Hyderabad, acting in communication with the Nizam's Government." The Secretary of State for India acknowledged that the voluntary offer of the Nizam's Government "exhibits at once very enlightened liberality on His Highness' part and affords a very gratifying proof of the confidence which he has learnt to repose in the British Government."

† Page 7 of the Parliamentary Report on Railways in India for the year 1879-80.

The Holkar and the Sindia-Neemuch State Railways.

The second case referred to His Highness the Maharaja Holkar, who offered a sum of one million sterling "as a contribution for the construction of a railway to unite the Great Indian Peninsula Railway (at Khandwa) with Indore." The terms which the Maharaja proposed were that "he shall receive from the British Government $4\frac{1}{2}$ per cent. per annum interest on the capital thus to be contributed by him and shall share in half the surplus net profits in excess of that amount." "The intrinsic importance of the line," remarked the Government of India, "is so great, and the political advantage to be secured by the arrangement proposed so manifest, that we have not hesitated to give our assent to the Maharaja's terms, and to undertake to proceed at once with the construction of the line, accepting the liability of finding the sum, whatever it may be necessary for completing the junction between Indore and the Great Indian Peninsula Railway."

"It is satisfactory to us," added the Government of India, "to note that in the first year, after the Government had announced its intention of carrying out further extensions of railways in India by its own agency, two Native States should have subscribed such a sum on terms so favourable as those that we have described, for the construction of lines of railway which, while they will benefit considerably their own States, may also be regarded of primary importance to India as a whole. We cannot but trust that the example set by the Maharaja of Indore and Sir Salar Jung will be followed by other enlightened Rulers, and that we may for the future hope for the more active co-operation of Native Chiefs and Princes of India in all works of industrial enterprise."

The Secretary of State for India heartily concurred with the Government of India in these views and in regarding it as a matter of congratulation, and remarked that the offer of the Maharaja Holkar "is entitled to cordial recognition" that the terms on which he had arranged to make the contribution

constitute an example of a form of guarantee free from some of the worst defects of the guarantee system.*

His Highness the Maharaja Holkar is entitled, whenever he travels on the Holkar State Railway, to one set of carriages 1st, 2nd and 3rd class and one brake-van, free of charge. The Holkar State Railway also built a special Saloon for His Highness at the cost of the Railway.

Subsequently His Highness the Maharaja Sindhia of Gwalior lent a sum of 75 lakhs of rupees to the Government of India at 4 per cent. per annum for the construction of the line from Indore to Neemuch, including the branch from Fatehabad to Ujjain on the metre-gauge, which was opened for public traffic on 3rd August 1876.† From 1882 it was amalgamated with the Rajputana State Railway on the opening of its Section from Nasirabad to Neemuch, it having been previously worked jointly with the Holkar State Railway by Government management and the combined Railways were then known as the Holkar and Sindhia-Neemuch State Railways. They are now worked by the Bombay, Baroda and Central India Railway Company as parts of the metre-gauge system leased to the Company since 1885.

It was specially arranged that the names of the States should be attached to the names of those railways. Accordingly the following names were adopted for the railways which have been subsequently classed as Imperial, viz :—

The Holkar State Railway.

The Sindhia-Neemuch State Railway.

The Sindhia State Railway from Agra to Gwalior.

These names have been dropped and the first two lines are treated as parts of the Bombay, Baroda and Central India Railway and the last one of the Great Indian Peninsula Railway, by which

* Government of India Resolution No. 1259-61 R. dated 15th July 1870, pages 951-53 of the Supplement to the *Gazette of India* of July 23rd 1870.

† Director-General's Administration Report for 1885-86 page ci.

Companies the State lines are worked on behalf of the Government. The Princes who contributed the capital, specially desired the names of their States to be so attached, but after a generation or so the correct names would be forgotten if the practice of the Companies be allowed to continue. Upto the year 1912, even the Bombay, Baroda and Central India Railway Company used the following heading on all its forms and publications :—

**"Bombay Baroda and Central India Railway
including**

Rajputana-Malwa Railway.

(Includes the Rajputana State Railway, the Holkar State Railway, the Sindhia-Neemuch State Railway, the Rewari-Ferozepore State Railway and the Cawnpore-Achnera State Railway)."

Sindhia State Railway, Agra Cantonment to Gwalior, 78·49 miles.—

This line was first opened for grain traffic on 15th November 1877, and for general traffic on 10th January 1878 and completed on 15th May 1881. It was first worked by Government as a part of the Rajputana State Railway. From 1881 it was made over to the East Indian Railway Company for working under the terms recorded in appendix M, page lvi of the Administration Report for 1881-82. From 1st March 1889 it was leased to the late Indian Midland Railway Company, under a contract dated 18th March 1890 between the Secretary of State for India in Council and the Indian Midland Railway Company, *vide* appendix H, page xciv of the Administration Report for 1890-91.

That Company's lines were combined with the Great Indian Peninsula Railway, which is now working the Sindhia State Railway as a part of the system, under a contract dated 21st December 1900 between the Secretary of State and the Great Indian Peninsula Railway Company.

At page 26 of the Annual Report for the year 1881-82 by Sir Juland Danvers, the capital cost of the Sindhia State Railway upto 31st December 1881, was given at Rs. 86,16,662. The Maharaja Sindhia lent the British Government 75 lakhs of

rupees at 4 per cent. per annum for the construction of this line.

Nizam's State Railways.—

Under the terms already mentioned, the Nizam's State Railway was constructed by the British Government, with capital provided by His Highness the Nizam. The first section of the line from Wadi to Secundrabad, 115½ miles, was opened on 9th October 1874, and was worked upto the end of 1878 by the late Great Indian Peninsula Railway Company, with its own rolling-stock; from January 1879 to 31st December 1884, it was worked by the British Government agency, and from January 1885, it is worked by a British Company styled as "His Highness the Nizam's Guaranteed State Railway Company," which entered into a contract with His Highness the Nizam on 27th December 1883, for the acquisition, management, maintenance and working of this line, the construction of certain extensions and the preferential right to construct all new railways in His Highness' territories. The company had for 20 years a guarantee from the Nizam's Government of 5 per cent. per annum on its share capital of £2,000,000, with debenture capital authorised by the State. The company since constructed and completed additional lines, bringing the total length upto 330.13 miles on the Broad-gauge by February 1889.

The subscribed Capital of the Company is £4,200,000. The guarantee on the share capital ceased on 25th June 1904 but that on debentures ceased or ceases on various dates between 30th June 1904 & 31st January 1928. Debentures for a further sum of £700,000 were taken without guarantee from the Nizam's Government. Interest for each year at 5 per cent. on the share and debenture capital is the first charge against the net earnings for each half-year or year. Of any residue, one-half is to be applied in payment to the Nizam's Government of guaranteed interest not previously recouped and in payment of any other sums owing by the Company to that Government, and the other half is to be retained by the Company. When the Government

has been reimbursed all sums paid under the guarantee together with simple interest thereon at 5 per cent. per annum, the company is to be entitled to the whole of the net earnings. On the day on which the Railway is acquired, the Nizam's Government is to pay to the Company in sterling in London the amount of the unredeemed capital *plus* a bonus of 25 per cent.

This company also secured the construction and working of the British Indian State Railway from Hyderabad frontier to Bezwada, 20.58 miles, known as the Bezwada Extension on the Broad-gauge. This line was opened in February 1889.

The Nizam's Guaranteed Railway Company works also the following lines:—

1. Hingoli Branch 3'-3 $\frac{3}{4}$ " gauge, 50.31 miles, opened on 15th May 1912, belonging to His Highness' Government, who provide all funds chargeable to Capital Account.

2. Hyderabad-Godavari Valley Railway, 3'-3 $\frac{3}{4}$ " gauge, 391.13 miles, opened between 21st October 1899 and 16th May 1901. The capital for this line, £2,150,000, has been provided by the Company (the State giving the land free of cost) on a guarantee by the State of interest (3 $\frac{1}{2}$ per cent.) for 20 years from 16th May 1901, payable on the debentures, with an additional 1 per cent. for a Sinking Fund. Any surplus after meeting the above charge is divided equally between the Nizam's Government and the Company. On purchasing the line, the State is to pay to the Company the unredeemed capital only.

The original contract of this company illustrates the grasping character of the Company. It beats the provisions of similar contracts made by the British Companies with the Secretary of State for India. While the Secretary of State was at that time allowing guarantees of 3 or 3 $\frac{1}{2}$ per cent. per annum for short periods, this company obtained the guarantee from the Nizam's State at 5 per cent. and for a period of 20 years, with preferential rights to construct all new Railways in His Highness' territories. The railway was already the property of the State; the State sold it to the company at par value, and then paid to the Company 5 per cent.

per annum on that value and on the costs of the extensions, with profits and advantages of working the property. It is hoped the Government of His Exalted Highness will take early steps to end the arrangement with the Company and to have the management of the State railways in the hands of the State officers. The 20 years' guarantee expired on June 30th, 1904, but the contract is yet to run up to 1st January 1934, when it may be terminated by giving 12 months' notice in London. The State will then have to pay to the company in sterling in London the amount of the unredeemed capital, *plus* a bonus of 25%. We wonder how the State was advised to agree to such high terms.

Railways in Kathiawar.—

In 1880 a line was opened from Bhavnagar to Wadhwan; it was followed by a branch from Dhola to Dhoraji. Both of them were constructed by the British Government for the Indian States of Bhavnagar and Gondal. They were accordingly styled as Bhavnagar-Gondal State Railway and worked under the direction of a Committee of Management consisting of representatives of the State concerned, the Manager of the Railway and the British Agent to the Governor in Kathiawar. The Junagadh State Railway was added in 1888, the Jetalsar in 1893, the Jamnagar Railway in 1897, and the Dhrangadhra Railway in 1898; and the combined railways were styled as Bhavnagar, Gondal, Junagadh, Porebandar State Railway. This combination continued till 30th March 1911, when the Joint Board of management was abolished and separate managements for the following State Railways were established:—

1. Bhavnagar State Railway (including the Dhrangadhra Railway.)
2. Gondal-Porebandar State Railway (including Jetalsar Rajkot.)
3. Jamnagar State Railway.
4. Junagadh State Railway.

The Morvi State Railway was originally constructed on the 2' 6" gauge from Wadhwan to Rajkot. It was converted to the metre-gauge in 1905. Its management and working have

always been in the hands of the Thakur Saheb of the State, and are a model for economy in costs.

Mysore State Railways.

The first railway in the Mysore State was proposed from Mysore to Bangalore in 1870. The earthwork on the first 35 miles was commenced for relief purposes during the famine of 1877-78 and the line from Bangalore to Channapatan was opened on 1st February 1881. It was carried to Mysore on 25th February 1882. In constructing the line, the State incurred a debt of Rs. 68,60,508.

In the Government Administration Reports, the line was entered among the "Native State Railways in the hands of the States" upto the year 1885-86.

The Durbar wanted to complete the line within their territory up to Harihar, by raising a local loan, but the British authorities had the line hypothecated to the Southern Maharatta Company much against the wishes of the Durbar.

Under a contract dated 31st August 1887 between the Secretary of State and the late Southern Maharatta Railway Company, the completion, maintenance and working of the Mysore State Railway were entrusted to the Company. The contract embodied the following provisions:—

The total cost of the Mysore State Railway to the date of its transfer to the Company was estimated at Rs. 68,60,508, and the total cost including that of the extensions to be constructed on that date by the company was estimated not to exceed £1,224,000. The Company accordingly raised this sum by issuing debenture stock of £1,200,000, not redeemable before 1st March 1936 but redeemable after that date at par, carrying interest at 4% per annum, the stock realizing a premium of £2 per cent. Out of this, the sum of Rs. 68,60,508 was to be paid over to the Mysore Durbar.

The Secretary of State had the power to determine the contracts of the former S. M. Railway Company either on 30th June 1907, 30th June 1917 or 30th June 1927, the final term

ending on 30th June 1932; but under new contracts executed on 26th June 1908 and 12th August 1914, the determinable term has been extended to 31st December 1937 or 31st December of any succeeding fifth-year reckoning from that date.

The revised terms for working and maintenance are given in the Railway Board's Administration Report as follows:—

The railway, which as between the Government of India and the Company, without prejudice to any arrangement between the former and the Mysore Durbar, is declared to be absolutely the property of the Government, is maintained and worked by the Company on behalf of the Government, all funds for capital expenditure being provided by the Durbar.

From the joint working expenses of the entire system of the Company are first deducted certain direct charges, viz:—On account of New Minor Works, Payment for use of Rolling Stock, and for use of joint Stations, these direct charges being payable in their entirety by the railways incurring them. The balance of the joint-working expenses is then divided as between the whole system and the Mysore Section in proportion to gross earnings of each. The share of the Mysore Section thus arrived at, added to the direct charges incurred on that Section, form the working expenses of the Mysore Section.

The gross receipts attributable to the Mysore Section are applied.—

- (a) In discharge of the working expenses arrived at as above, and
- (b) In payment of interest at 4 per cent. on capital expenditure incurred on the Section since December 1907;
- (c) The surplus being divided between the Government (on behalf of the Durbar) and the Company in the proportion of $\frac{1}{3}$ and $\frac{2}{3}$ respectively.

In the cases of the Mysore-Nanjangud and the Birur-Shimoga lines, the capital expenditure was provided by the Durbar, while the lines were maintained, stocked and worked by the company, who charged the working expenses at the same proportion of the

gross earnings of these lines as obtained on the Company's system as a whole, *plus* 5 per cent. of the gross earnings of the two lines of the Mysore State for the use of the Company's rolling-stock, *plus* cost of new Minor Works, in each half-year. And in addition thereto the Company as from 1st July 1908, was entitled to $\frac{1}{20}$ th of the surplus of the net earnings, after payment thereof of the interest payable on any capital expenditure incurred in respect of the two lines after 31st December 1907. The residue was to be paid by the Company to the Durbar.

The Durbar had the option of determining the agreement on the 1st January or 1st July in any year on 12 months' notice in the case of Shimoga Railway and 6 months' notice in the case of the Nanjangud Railway.

The Kolar Gold Fields Railways, 5'-6" gauge, also belongs to the Mysore State and is worked by the M. & S. M. Railway Company under similar terms to those for the other lines of this State, the Company reserving the power to withdraw from the working agreement, if sanction be accorded to the construction of a competing line to the Gold Fields.

For a long time the Durbar was not active in regard to the Railway extensions. It was only in Sir M. Visveswaraiya's time that the matter was seriously thought of and a Railway Department of the State established. Then the narrow-gauge line from Bangalore to Boringpet *via* Chik-Ballapur and Kolar, a distance of 102 miles, owned by two independent bodies, *viz.*, a portion by the Bangalore-Chik-Ballapur Railway Company, and the other portion by the Kolar District Board, was constructed and opened for traffic. Then the State constructed the metre-gauge line from Arsikere to Mysore *via* Hassan, a distance of 102 miles. Both these are worked by the Durbar. In order to have access to Bangalore for administrative purposes, the Durbar requested the Secretary of State to arrange with the M. & S. M. Railway for the surrender of a portion of the hypothecated line from Mysore to Bangalore. After a lot of correspondence the Company agreed to make it over from 1st October 1919, from which date the

State has taken over from the Company the Nanjangud and the Shimoga branches also, with running powers between Birur and Arsikere, so that if the Durbar choose they can run through trains from Shimoga to Bangalore *via* Birur, Arsikere, Hassan, Mysore and Maddur. But the Durbar did not exercise running powers between Birur and Arsikere over the M. & S. M. Railway, because the terms proposed by the M. & S. M. Railway were not acceptable, the Company claiming 75 per cent. of the earnings for the permanent-way, station staff and stores, giving the balance of 25 per cent. to the Durbar for finding the stock, running staff and locomotives. In surrendering the Bangalore-Mysore portion of the hypothecated line, the M. & S. M. Railway Company have claimed that they may be permitted to continue to work undisturbed the Kolar Gold Fields line which is on the Broad-gauge (ten miles in length) as well as the Hindupur line, until the period of the contract is over, *viz.*, 1937. With the dismemberment of the late Madras Railway and the formation of the new M. & S. M. Railway Company for the combined system, the Mysore Durbar could have resumed the hypothecated lines by paying the amount due to the late Southern Maharatta Railway, but the Government then in power did not care to do so and permitted the Secretary of State to extend the contract till 1937.

Palanpur State Railway.

The Palanpur-Deesa State Railway, 17·28 miles long, was opened for public traffic on 8th November 1893. Its capital cost is about Rs. 4,32,700, which was provided by the Palanpur State and the Government of India in the following proportions:—

				Rs.
The Durbar	...	...	...	1,85,000
Government of India	...	...	...	2,47,700
Total				4,32,700

The railway is owned jointly by the two States, and is worked by the Bombay, Baroda and Central India Railway Company as a part of the metre-gauge system. The Branch Railway is

debited with a share of the general working expenses of the Company's entire system in proportion to the gross earnings of the Railway. The net earnings, after meeting the working expenses including the proportionate share of surplus profits allowed to the Company, are divided in proportion to the capital provided by each. The dividend on the Durbar's capital for the year 1915-16 was 8·59 per cent.

Railways in Portuguese territories.

By a treaty of Commerce dated 26th December 1878 between England and Portugal, after providing for reciprocal freedom of commerce, navigation and transit, and for the opening of ports, harbours, and roadsteads, and rivers in the Indian dominions of each, on the same conditions as those on which they are open to the subjects of the contracting party in whose dominions they are, it has been agreed that whenever the British Government shall receive notice from the Portuguese Government that a concession has been granted by them to a joint-stock company for the construction and maintenance, within the Portuguese territory, of a railway from the port of Marmagaum towards the town of New Hubli, and that measures will be taken for rendering that port safe and suitable for purposes of commerce, the Government of India will, on being satisfied that such concession is suitable and sufficient, and that capital for the undertaking is forthcoming, enter into a contract with the said Company for the grant of the necessary land for the portion of the line lying within British territory; for affording all facilities for the making and working of the line; for the conveyance of the mails by the Company; for the construction of telegraphs by the Indian Government; and for the construction of a railway to Karwar and to any other place in India from any point on the line.*

General.

On 31st March 1918, the total length of railways, in which the Indian States were concerned, was 5,027 miles, as detailed in

* Report by Sir Juland Danvers on Railways in India for 1878-79, page 5, para. 15.

Appendices XI, XII and XIII, viz:—

	Miles.
XI.—Indian State Railways worked by Indian States	2,478·80
XII.—Indian State Railways worked by Main line...	1,788·18
XIII.—Companies Guaranteed by Indian States ...	760·00
Total	5,026·98

See diagram II in Appendix 15.

Terms for Working.—Attention is drawn to the terms of working given in Appendix XII. For the working of one line by another administration, we consider the terms conceded to Branch-line Companies are quite fair, where the Working Agency charges for Working expenses, the same percentage of gross earnings as is incurred on the entire system of lines worked by the Administration; but in some cases we find a prohibitive arrangement, whereby the working Company charges the *actual* expenses for working a State line, even though it may be on a different gauge.

We consider it prohibitive, because it is not always practicable to keep an accurate record of actuals, and because the State does not get the benefit of the economies secured by joint-working. It is wrong in principle to charge any portion of working expenses to the capital account. In such cases we strongly advise the States and other proprietors of railways to follow the example of the British Companies in India, who generally keep the management and working of their lines in their own hands—see pages 14-15 herein. The terms concluded by the Indian Government with the J.-B. Railway, for the working of the British Section of the Jodhpur-Hyderabad Railway, are reasonable and fair, as both the contracting parties are States who should equally bear the burden if any. In that case the working expenses of the combined system, *excluding* cost of maintenance, are divided in the ratio of gross earnings of each section. Maintenance charges are the actual expenditure on each section for direct charges. For the provision of rolling-stock, Government pay to the J.-B. Railway 5% of the share of the cost of the whole of the joint-stock of the

system which is attributable to the Jodhpur-Hyderabad Railway, the book value of the stock being divided between the several sections of the System in proportion to the gross earnings of each for the period.

In the case of the Bezwada Extension of the Government of India, the N. G. S. Railway Company works the line for the same percentage of its gross earnings, as is incurred on the Company's 5'-6" gauge for the same half-year, *plus* 5 per cent. of the gross earnings of the Bezwada Railway for the use of Rolling-stock, *plus* any extraordinary maintenance charges due to cases other than ordinary wear and tear.

The J.-B. Railway also works, on behalf of the Government of India, Mirpurkhas Jhudo and Khadro railways, belonging to private Companies, treating the Companies' lines as part of the British Section of the J.-B. Railway system; the Government of India having undertaken to work the Companies' lines for 40 per cent. of their gross earnings, and to bear any difference in the J.-B. Railway charges debitable under the terms for the working of the British Section. These terms are exceptionally liberal.

Management.—Out of the 35 States which own railways, 16 had their own management, while 19 of them employed the agency of the main line to work their railways. Among the former were three States of Rajputana, *viz.*—Udaipur, Jodhpur and Bikaner; and the Gwalior and the Mysore States. We desire to draw the attention of our Princes to the constitution of the Railway Department lately established by the Mysore State; as the subject is of great importance to the country, we consider it necessary to give the main details* of the superior staff. They are as follows:—

Agency.

Agent and Secretary to Government—Mr. D. G. Dani,
B.Sc., F.C.H., A.M.I.C.E.,

Deputy Agent and Under Secretary—Mr. Lakshmi Nara
Simha Rao T., B.A., B.L.,

*Pages 92-93 of Railway Board's Classified List, 31st December 1918.

Assistants to Agent—Three other Indians.

Engineering Department.

Superintending Engineers.—Mr. Ananthacharya K., L.C.E.

Mr. H. D. Rice.

Personal Assistant.—Mr. Ramanujam, M. A.

3 Executive Engineers—All Indians.

6 Assistant Engineers—Five Indians and one Mr. R.L. Steele,

4 Sub-Assistant Engineers—All Indians.

Locomotive Department.

Locomotive Superintendent—Mr. Srinivasa Iyengar K.,
M.E., A.M.I.M.E.

2 Locomotive Probationers—Both Indians.

Carriage & Wagon Department.

C. & W. Superintendent—Mr. R. E. Bury, M.I.M.E.

„ Probationer—Mr. Venkatesh M., B. E.

Traffic Department.

Traffic Manager—Mr. B. Vencoba Rao.

2 Asstt. Traffic Superintendents—Indians.

Audit & Stores Departments.

Comptroller and 4 Assistants—All Indians.

Chief Storekeeper—An Indian.

Looking to the States of Rajputana, we find Mr. W. Finnigan as the only officer-in-charge of the Udaipur State Railway. On the large system of the Jodhpur-Bikaner Railways, the Manager is a European, 3 District Managers, 2 Executive Engineers, 6 Assistant Engineers, 5 Loco. and Carriage Officials, the Auditor of Accounts, and the Storekeeper are all Europeans or Anglo-Indians; the only Indians we find on this *Indian* Railway are two subordinate officials, *viz* :—

Manager's office Superintendent and an Assistant Auditor.

This glaring difference between the Mysore State Railway and the Jodhpur-Bikaner Railways is remarkable. We draw particular attention of His Highness the Maharaja of Bikaner to this matter. All the high posts on his railway are a monopoly of outsiders, while no member of His Highness' subjects or of the coun-

try has a chance in the management of the railway, which has been provided at the expense of His Highness' Indian subjects. We hope our appeal will not go in vain if we ask His Highness to follow the example of the Mysore State and to appoint a competent Indian at the Head of the Railway Department.

Like the Mysore State, His Highness may borrow the services of an Indian Officer from the Government of India, and organize the several Departments of the Railway, according to the division generally followed on the Railways (see diagram at page 123), and thus bring the Railway on a proper system of working. With the advice of the Indian Manager, His Highness will readily find competent heads for the other Departments of the Railway and will be able to make economical arrangements for the training of all staff, superior and subordinate, from the members of his own subjects. The condition of the line and stock of the J. B. Railways will not stand a comparison with the neighbouring line and stock of the R. M. Ry.

The Indian States have the reputation of having an entire *Indian* administration. Could this be applied to the administration of the Jodhpur-Bikaner State Railways, where Indian element is employed only in the lowest posts?

We have often heard that in the Indian States, many things are done, which it is unusual to do in the British administration. The management of the Jodhpur-Bikaner Railways furnishes such an illustration, for, were it not for such influence, how could Indians have been kept out of even that share in the higher posts, which they have on the British Indian State Railways. Under head II of Railway Classification in several appendices to the Railway Board's Administration Report, the J.-B. Ry. administration is shown as a Company, for the British State Railways, entrusted to the J.-B. Railway for working, are classed among the *Company-Worked* State Railways. But the administrations of even the Companies are not so exclusive in the employment of Indians in the superior grades as the administration of the Jodhpur-Bikaner Railway is, one of whose proprietors is one of our most enlightened

Princes. We draw His Highness' attention to this matter. His Highness' subjects made a special complaint against the railway administration at the All-India Railwaymen's Conference held at Bombay in February 1921.

Until the administration of the Railway Department is properly reorganised, there is no hope of a substantial improvement in the economic conditions of His Highness' territory. Trade, industries, agriculture, moral and material progress of a country depend very largely upon the proper working of the railways. It is not at all enough to give the people, the costly luxury of a railway, without making them fit to resist the invasion of their industries by foreign manufactures and to take full advantage of the railway to hold their own in industries, trade and commerce. There is a very urgent need of training Indians in the various trades and arts required for the working of a Railway. A training on these lines will be of material assistance in the improvement of agriculture and manufacturing industries, which should be conducted with modern mechanical appliances. The Railway Workshop is the best place for such training. All these reforms are only possible if Indians are placed at the Head of the Railway Administration. It is hopeless to expect such reforms from non-Indians, who work the railways mainly to assist the export and import trade with foreign countries. Local industries seldom, if ever, receive that attention from them which is necessary to push on the interests of the country. The people who defray the costs of providing and working the railways have a right to expect the State to safeguard their interests and to push them on to the utmost extent possible.

This appeal is made equally to the Princes of the other States, especially to their Highnesses of Baroda, Gwalior, Udaipur, Jaipur, and His Exalted Highness the Nizam of Hyderabad.

CHAPTER VI.—Reintroduction of Companies.

SECTION 1.—Views of Government.

THE policy of constructing and working by direct agency of Government was vigorously followed during the seventies, but a change in that policy became apparent when the negotiations for the acquirement of the East Indian Railway were opened in 1877, between that company and the Secretary of State for India, when Lord Salisbury with the concurrence of the India Office decided that "it is desirable to entrust the construction and working of railways to companies in preference to a State Agency."* On 3rd May 1877 General Strachey who was in the India Office at the time, wrote a confidential letter† to the Chairman of the East Indian Railway Company, conveying a declaration of Lord Salisbury's views regarding the acquirement of that railway by the State and the terms on which it was to be re-leased to the Company, either as then constituted or in some modified shape, to work the railway for a term of years.

General Strachey said that a despatch‡ was sent to the Government of India and he assisted in writing that despatch. To show how the movement for reintroducing British Companies in the railway work of India was developed, we shall hereafter quote the evidence recorded by the Select Committee of 1884; but it is remarkable that the policy of State Railways adopted by the Government in 1867-69 was fully supported by the Select Committee of the House of Commons, that enquired into the Railways in 1878 and 1879.

* Para. 55 of Evidence recorded by Select Committee of 1884.

† Page 102 of History of the East Indian Railway by G. Huddleston, C. I. E., 1906.

‡ No. 205F dated 21st January 1877 quoted at page 555 of Report of the Select Committee of 1884.

In the face of the opinions recorded by that Committee against the Guaranteed Companies, the policy initiated by the India Office in 1877 of re-employing companies was pushed on, both in England and India. This retrograde step was justified in some places on the ground of stress felt by the Government of India owing to famines and the Afghan War between the years 1874 and 1879, but the famine of 1869 did not in the least affect the determination of Government to use State Agency in preference to the old Guaranteed Companies. The difficulties created by the Afghan War, however, lent a lame excuse to the theory, which was formulated by the India Office in 1877, and the capitalists of England, prompted by some of the English officials of India, were at the back of that movement. While the railways were working at a loss in the earlier days, the capitalists were indifferent about investing their money without a high guarantee from Government; but when they saw promising results from the working of the railways, brought about by the emulation created by the State Railways, they stepped in to exploit the country. They were backed up by the India Office. We are told that Lord Ripon came out to India as Viceroy "pledged to the reversal of the State Railway policy." We are sorry for Lord Ripon, who, in other respects, was a just and sympathetic Viceroy.

To relieve the pressure of work on the Government of India, Lord Lytton's Government proposed in June 1880 that light cheap lines might be constructed on the separate financial responsibility of the Provincial Governments.* This was a very sound proposal and, though carried on for a short period, was abandoned subsequently, when the Provincial Railways were placed on the Imperial list under the Government of India.

"In a Despatch † No. 1 (Financial) dated 6th January 1886, the Marquis of Hartington wrote to the Government of India, recapitulating the principles in respect to construction of railways in India, and dividing the lines under two distinct classes, viz :—

* Page 30 of Railway Policy in India.

† Pages 488-92 of Report of the Select Committee of 1884.

(1) Productive Railways, which were considered to be probably remunerative within a maximum limit of five years from the date of opening of the line for traffic, giving 4 per cent. per annum on the capital invested, including therein all arrears of simple interest incurred upto that date, and also the capitalized value of the land revenue and of leave allowances and pensions, (para. 8).

(2) Protective Works, which, although not directly remunerative to the extent which would justify their inclusion in the class of Productive Works, were calculated to guard against a probable future expenditure in relief of the population (para. 11).

As regards Protective Railways of class 2, it was laid down that they should be carried out by the direct agency of Government, from funds allotted from revenue, and not from borrowed money; whereas for Productive Works of class 1, agency of private enterprise was to be employed. This was laid down in para. 2 of the despatch in the following terms:—

“I wish, however, in the first instance, to dwell briefly on the expediency of constructing through the *agency of private enterprise*, some of the works which, under the the existing system are *undertaken by the State*. . . . In the case of railways, I do not doubt that your Excellency will bear constantly in mind the importance, whenever possible, of ensuring their *construction by private capital*, either local or European. It is true that upto the present time no companies have been found willing to undertake the construction of railways without a Government guarantee; but I would nevertheless strongly urge upon your Excellency that, when any reasonable prospect of success presents itself, an endeavour should be made to encourage the raising of capital through private agency *on the exclusive security of the success of the undertaking*. Any step in this direction will meet with my most cordial support and co-operation. In the event of its becoming apparent that the due execution of this policy is impracticable, it may become desirable to consider whether a *modified system of guarantee* might not advantageously be adopted.

By modified system, I mean *one so restricted in respect of time and to the rate of interest guaranteed as to give the subscribers a real interest in the efficient and economical administration of the railways.*" Itatics are ours.

The Government of India in their despatch* No. 92 (Railway) dated 22nd July 1881, in connection with the recommendations of the Famine Commission of 1880, after explaining the railway policies followed in the past and describing the difficulties in the way of finding the capital required for additional railways, viz :—

- (a) Limitations as to the amount to be borrowed ;
- (b) Stringent conditions as to the remunerative character of the railways ;
- (c) Impossibility of raising fresh taxation ;

wrote to the Secretary of State :—

" We have no hope of being able to effect what we urgently require, without a delay which it is of the utmost importance to avoid, except by entrusting our railway works to private enterprise under a safe and reasonable guarantee." (Para. 8) They did not, however, desire a return to the system which was so decidedly condemned by Lord Lawrence and Lord Mayo, but they meant to take advantage of the favourable state of money market and the amount of money that was at the time seeking investment—an opportunity for inducing capitalists to invest in public works in India, such as, they believed, had seldom if ever existed before, which, while giving the capitalist security for the small rate of interest his money could command in the open market, should not unduly burden our revenues (para. 9).

The Hon'ble Rivers Thompson, who was then a member of the Government of India, appended a separate minute† which accompanied their Despatch No. 92 Railway dated 22nd July 1881, in which the Hon'ble member recorded that for the construction of productive Railways—

* Pages 492-94 of Report of the Select Committee of 1884.

† Pages 495-97 of Report of Select Committee of 1884.

"Not only does it seem to me that pecuniary guarantees are unnecessary, but it appears reasonably open to question whether in the interests of India, the State should not reserve such lines, which have fair remunerative prospects, absolutely in its own hands. This question, however, does not arise in the present instance. If it did, I should not be prepared to admit the wisdom of a policy under which the Government should make over all its carefully selected paying lines to private enterprise, and construct all the unproductive lines by the State Agency. Rather than this, and for the benefit of the Indian tax-payer, I contend that it would be much better that *Government should keep the construction and management of all lines in its own hands*, so that the profits from the good lines may be taken as a set-off to the losses upon the bad; while, if all railways in India are eventually to be profitable—a possibility which all recent returns would apparently justify—the retention of such a property in the hands of the State seems to me in the financial position of India to be of the greatest importance."

Italics are ours. These views, it need hardly be remarked, were not only sound for any State but absolutely necessary in the interests of India. Unfortunately, however, they were ignored in favour of the British Companies.

The Marquis of Hartington, in his Despatch No. 365 F. (Financial dated 8th December 1881* replied to the Government of India, disagreeing with the large programme of railway construction, but expressed great satisfaction with the terms concluded with the Central Bengal Railway Company (para. 6), and added—

"While I continue to look with some hope to the policy of the development of remunerative public works in India *by private capital and possibly to the substitution of this agency for that of the Government* by means of borrowed funds, I am unable to regard it as a suitable agency for the completion of those lines which are indicated by the Famine Commission as necessary for the protection of the country against famine, though uncertain in their prospect of pecuniary profit. For the completion of these lines I can look to no other agency than that of the Government itself." (para. 18 of the Despatch.)

In their Despatch No. 29 (Financial)† dated 23rd January

* Pages 507-09 of Report of the Select Committee of 1884.

† Pages 509-523 of Report of the Select Committee of 1884.

1883, the Government of India addressed the Secretary of State on the general question of their railway policy.

In para. 8—2nd, they summed up the principal points of Lord Hartington's policy of 1881 in the following terms :—

“2nd—Railways should be constructed.

- (1) by unaided private enterprise, to the utmost possible extent ;
- (2) under guarantees of limited amount and duration, when unaided enterprise was unobtainable ;
- (3) by the State :—

(a) out of borrowed money or surplus revenue, provided they would, within five years, return four per cent. interest on the capital outlay ;

(b) out of the £750,000 (from the Famine Insurance Fund) if they would not give such return, but were “Protective ;” and

(c) under special arrangements, if made under pressure of war or actual famine.”

The Government of India advocated a policy, the corner-stone of which was that—

“Instead of continuing State Agency for the construction of productive lines of railways, we should, for the future as far as possible, *exclude the action of the State altogether from this field of enterprise*, and that, as a general rule, the Government should only undertake the construction of railways which from their unprofitable character in a commercial sense or other causes, cannot be made by private agencies.” (para. 13).

This was the fatal recommendation, to which we take the strongest exception. The essence of the policy in force in 1883, they remarked, was that the railways constructed by the State should, generally speaking *be self-supporting*. The essence of the *new* policy advocated by the Government was that the railways constructed by the State *need not and often will not*, be self-supporting.

The Government of India divided the proposed railways in two schedules, *viz* :—

- (A) Railways indispensable for protective or other urgent purposes, to be completed or made by

the State or other agency on its behalf, and State Rys. under construction	Miles. 3,837	Estimated Cost £. 27,552,000
(B) Railways to be left to Private enterprise	3,497	24,344,000
Total	7,334	51,896,000

In addition to the schedule A, the Government of India proposed to spend £5,030,000 on improvement of open lines and working stores for State Railways, making a total of 32,582,000 to be spent in five years, or over six millions per annum.

The schedule (A) was divided into five sub-heads as follows:—

	Miles.	£
a.—Capital to be raised and interest paid by the Government of India ...	1,206½	7,727,000
b.—Capital to be raised by Government of India, interest paid by Provincial Governments	585	3,493,000
c.—Capital to be raised by "Construction and Working" Companies, interest to be paid by Government of India	437½	3,749,000
d.—Capital payable from Provincial balances, no interest charge ...	124	353,000
e.—Capital to be raised by private companies under "limited guarantee" system	1,484	12,230,000
Total	3,837	27,552,000

This meant three different sorts of agencies, two classes of companies, and one direct agency of Government embracing Sub-heads (a), (b) and (d). The lines under sub-head (c) were to be carried out by the O. & R. and the S. M. Railway Companies, and those under sub-head (e) by Companies* to be formed on the Central Bengal terms, if terms no better, on the whole, than those terms, could be obtained.

* The railways were actually constructed by the Indian Midland and the Bengal-Nagpur Companies formed in 1885 and 1887 respectively.

As regards railways left for Private enterprise, the scheme of the B. & N. W. Railway was specially mentioned, and the Government of India recommended (para. 63) "for the future our policy must be to abandon any idea of making a direct profit out of the lines to be constructed through the agency of unaided private enterprise." This was a departure from the policy recorded at page 262 herein.

On the question of reverting to the "limited guarantee" system, the Government of India were decidedly of opinion that as a general principle, they should not do that. "Having made provision for such railways," they added, "as are indispensable, but which, owing to their unremunerative character, cannot be constructed by unaided private enterprise, we think that we should leave the field clear, and whilst we abandon all idea of taking any part of the profits, we should also refuse to give any pecuniary assistance to any companies which may be formed, beyond giving the land free. The charge for the land in the cases of these railways would be debited to 32, Railways," (para. 64).

Whilst thus considering it undesirable to extend the limited guarantee system to any of the railways in schedule (B), the Government of India thought that "the debit to capital of interest during the course of construction, in the case of those railways, is quite unobjectionable, and indeed, very necessary." (para. 65).

They also recommended that in respect of all railways made by companies, the State should reserve to itself a power to purchase the lines under such conditions as may be agreed upon in each case (para. 66).

When that programme had been carried out, it was declared it would be for the Government of the day to reconsider its position by the light of the circumstances of the time being. But the Government of India trusted that it would then be possible to stop State expenditure on railways altogether, to leave the further development of the country to private enterprise, and to

introduce a scheme for the reduction of debt (para. 68). Those who now advocate large capital outlay on the State Railways, ignore this promise of Government.

Referring to para. 13 of Lord Hartington's despatch No. 365 of 8th December 1881, quoted below,* the Government of India remarked it would be dangerous to leave on record a declaration of this description from the Secretary of State, without stating that they could not agree to it. "In the first place they added, "we ought most carefully to avoid inducing any body to undertake the only three lines which under our proposal will be made under the modified guarantee system. In all the communications we have had with various promoters of railways, we have most carefully explained to them that we are quite willing to give every information in our power, but that it must be fully understood that we would take no responsibility whatever as regards the correctness of the information themselves. We think therefore it should be very distinctly understood that we do not in any case recognise any moral obligation to go beyond the strict terms of our contracts." (para. 72).

This foregoing Despatch was replied to by Lord Kimberley in his No. 231 (Financial) dated 16th August 1883, remarking that the proposals of the Government of India, with the large programme of railway construction, involved a complete reversal, in many of the most important points, of the rules which had been in force for some years, that their programme went far

* "Neither can it be overlooked that, at the expiration of such a period of guarantee, there would be a powerful moral obligation on the Government, if the undertaking should prove to be unremunerative, to come to the assistance of a body of shareholders whom it had induced to enter on a philanthropic undertaking for the benefit of the people of India, knowing at the time that the line was not one which could be constructed on commercial principles. The assumption of a liability of this character, certain for a considerable period and subsequently undefined, appears to me to differ not very greatly from the direct increase of indebtedness which it has been the object of recent instructions to avoid."

beyond what seemed to have been contemplated by the Famine Commission.

The Secretary of State added that the rapid construction of railways upon a large scale in Europe and America had been accompanied by a rise in the price of labour and material which had seriously detracted from their financial success (para. 72).

His Lordship was, however, deeply sensible of the importance of increasing the means of railway communication in India, not only with a view to avert or mitigate the effects of future famines, but *also to aid* in the development of the *agricultural resources* of the country by affording additional facilities and *new outlets for foreign trade* (para. 13).

He admitted that the time had arrived when it was proper to consider whether the limit for borrowed money for public works in India might not safely be extended, and that with this view the Home Government had decided to propose the appointment of another Select Committee to re-examine the question of policy which should be pursued, with a view to the extension of railway communication in India, with especial reference to the recommendations of the Famine Commission with respect to "Protective" lines.

The Government of India, in their Despatch No. 269 (Financial) dated 24th September 1883, combated the views of the Secretary of State but admitted the propriety of referring the matter to the Select Committee of the House of Commons. At the same time they submitted for the Secretary of State's consideration whether the latitude recognised in respect of concessions to four private companies, *viz* :—the Bengal Central, the Southern Maharatta, the Bareilly-Ranibagh, and the Bengal & North-Western, might not be extended to embrace the Nagpur-Bengal and the Bhopal-Gwalior-Cawnpore projects, in consideration of their protective as well as commercial urgency, and also of "the trouble and expense to which the very competent syndicates," who were ready to undertake them, had been put in the course of the protracted negotiations which had already taken

place (Para. 20). This passage shows that the Government of India had already committed themselves to the unauthorized policy of employing the syndicates.

In concluding the Despatch, the Government of India repeated that two main considerations had weighed with them, namely a sense of necessity for speedy construction of railways for giving the country protection against famine, and the desire to attract private enterprise to railway construction in India. They added "we undoubtedly think that there are many advantages to be secured and various compensations to be found for such pecuniary sacrifice as may be occasioned by the employment of private enterprise even if aided to a limited extent by the State." "On this", they continued, "we are at one with the Famine Commission (Part II para. 4) and with the views of Lord Salisbury and Lord Hartington in their Despatches* and we are further impelled to use this private agency without any intention of entering on a discussion of its abstract merits in comparison with State agency, by the fact that only by enlisting it in addition to the latter can we hope to provide for India with sufficient speed the railways she requires. But our end is not, in any degree, the introduction of private enterprise merely for its own sake, but rather that speedy provision of railways which India urgently needs, in order, on the one hand to avert or mitigate the effect of famine, and, on the other, to develop her resources, to enrich her people, and to counteract the falling value of silver." This passage practically admitted the superiority of the direct State Agency and confirms the statement of Sir Guilford Molesworth, which we shall produce hereafter. We do not think the Government were justified in persistently advocating the employment of the companies or the large programme of railways.

We have already mentioned the Despatch of Lord Salisbury of 1877. The recommendation of the Famine Commission of 1880 referred to by the Government of India was as quoted below :—

* No. 205 F, dated 21st January 1877, paras. 26-28, and No. 54 R, dated 6th April 1882, paras. 13-18.

"It is beyond our province to discuss the question whether the provision of the requisite capital may be best secured and the construction of railways carried on by direct State action or through private companies. But we may remark that there would be manifest advantages in giving free scope to the extension of railways by private enterprise if it were possible; and though the original form of guarantee has been condemned, it may not be impossible to find some substitute which shall be free from its defects, and may secure the investment of capital in these undertakings without involving the Government in financial or other liabilities of an objectionable nature. Also, though the steps taken by the Government with a view to offering facilities for the extension of railways where a proportion of the necessary capital is subscribed locally, have not been effectual, great advantages could be gained by interesting local communities and capitalists in making investments in works of local public utility, and we trust that the plan may be further considered and, if possible, brought into practical operation."*

The Government of India misapplied this recommendation. It was for private enterprise "free from its defects," and for "interesting local communities and capitalists in making investments." It did certainly not mean the capitalists of England and retired English officials, who have actually promoted the companies now working the State Railways.

In replying to the Government of India, Lord Kimberly, in his Despatch No. 372 (F) of 13th December 1883, reiterated his previous remarks and declined to pursue the discussion, or to entertain the proposal for the construction of the two lines recommended, pending the result of the inquiry by the Parliamentary Committee.

In their Despatch No. 27 (F) of 29th January 1884, the Government of India, however, returned to the subject, and in giving a summary of their proposals for the convenience of the Select Committee, they stated that they meant to make full use of the

* Pages 589-90 of the Report of the Select Committee of 1884.

agency of both the State and private companies in prosecuting railway construction, that there would be no objection to handing over to construction and working companies, any of the lines entered as to be carried out by State agency.

Lord Ripon's Government was very persistent in urging the rapid construction of new railways. They first gave a warning to the Secretary of State and repeated it for the Select Committee of the House of Commons that if the railway programme was not rapidly carried out, there was the danger of a catastrophe of famine overtaking them. We do not think there was justification either for reversing the policy of Lord Lawrence or for such undue haste in the construction of the railways. In our opinion the financial results which are now before us have not justified the policy of the Government of India described above.

From this narrative it is clear that the reversal of the policy of State construction and management of railways was initiated in 1877 by the India Office headed by Lord Salisbury. It was nursed by the successive Secretaries of State and very strongly backed-up by Lord Ripon's Government in India, though many of the European officials in India were against it, as is evident from Sir Guilford Molesworth's paper of 1916, and other evidence produced herein. The actual results of working of the State Railways by these companies showed losses to Government for many years. We give below the results for one of the later years (1898) from statement No. 30 of the Administration Report Part I for 1898-99:—

Company.	Net revenue less contri- bution to Provident Fund.	Total actual char- ges for interest, surplus pro- fits, etc.	Net loss to Govern- ment.
	Rs.	Rs.	Rs.
Bengal Central ...	3,68,007	5,98,252	2,30,245
Bengal-Nagpur ...	33,63,854	53,37,953	19,74,099
Indian Midland ...	25,11,912	38,96,856	13,84,944
Southern Mahratta ...	19,06,242	47,95,733	28,89,491
Assam-Bengal ...	54,551	24,17,767	23,63,216
Burma ...	37,88,523	39,76,827	1,88,304

Even Mr. Thomas Robertson, C.V.O. in para. 20 of his Report of 1903 remarked that the S. M. Ry. company "have not the inducement of self-interest to keep down capital expenditure, and in other respects, are apt to find their interests conflicting with those of the Government." About the heavy losses incurred by the Assam-Bengal company, we have already drawn attention at pages 275-277. By allowing that company to carry on the ruinous operations, the authorities have violated the principle recorded at pages 263, 268, and repeated at pages 319 and 328.

As none of these Companies has anything to lose, should the railways become unpaying, we maintain that they do not take the same interest in keeping down either Capital or Revenue expenditure as a Company working entirely on its own account and risk will take. We see extravagance in their expenditure and it goes on unchecked, because the money does not come out of the pockets of the Companies, nor are the Companies under the influence of the public opinion. Their employment is totally against the interests of the people and should be ended. But the authorities responsible for appointing the companies will not remove them.

In para. 75 of his Report, Mr. Thomas Robertson wrote: "I may state at once that I cannot say, I have noticed any very marked superiority in practical management in the company-worked railways over those worked by the State, or *vice versa*." The circumstances he gave against the State management of railways in India in Clauses i to ix of that para. are not weighty enough to convince us. But the following comparison of the salaries of the higher officials then paid on the Government lines and on the company-worked lines, clearly showed the extravagance on the part of the companies:—

	Government- worked Rys.	Company- worked Rys.
Manager's pay ...	Rs. 1,600 to 2,500	Rs. 3,000
Chief Traffic officers ...	„ 1,350 to 1,600	„ 2,000

The higher rates of salaries for the Companies' lines were dictated by the recipients themselves; some of them helped the formation of the companies and in securing them the leases of the State Railways.

In para. 77 he added that the majority of the disadvantages he mentioned of the direct State-management "are not due to State-management *per se*, but to the system of working some railways through companies and some directly by the State; and that if the duality of system were eliminated, most of the objections to direct State management would disappear." We agree in this view and desire direct management of the State for *all* State Railways in India. We have no objection to private enterprise if it be undertaken on its own responsibility.

SECTION 2.—Evidence Recorded by the Select Committee.

From the answer to question No. 104 given by General Strachey before the Select Committee of 1884, it is evident that Lord Salisbury, Secretary of State for India, and the India Council in London were of opinion that the State Railways were a commercial concern and their working would be better in the hands of private companies than in those of the officers of Government. The reasons in support of this view were given in his answer to questions Nos. 31, 55, 104 and 258 before the same Committee. They may be summed-up as follows:—

That the working of railways in India involved "the most tremendous operations (31), that difficulties arose in connection with huge establishments, involving questions of pension, promotion and a great many class of personal matters (55), that in matters of claims for damage or loss of articles in transit, it was difficult for Government to go and haggle about such matters which could best be dealt with by a company (104), that it was needless to encumber the Government with such matters, while there were a great many functions of Government which could only be performed by a Government, such as looking after the administration of justice, the army, the Police (258); that the companies might be employed as a matter of convenience to do the work which Government could not manage to do themselves.

On the contrary he admitted that the direct management of Government was very good (93), that there would be no saving

in the amount of capital to be expended by the employment of companies (102), that the companies were not able to work railways more cheaply than Government (104), that the statistical returns gave perfectly satisfactory results for State management (105), that the staff on the Government Railways was certainly excellent (106), that the traffic would be less under companies than under State management (107), and more business would be done under State management (108), that the railways would be more likely of use to the public if in the hands of the Government than in the hands of private companies (109), that the public would obtain greater advantages from the Government than they would be able to do from the companies (112). These advantages very far outweigh any draw-backs of State management, and the grounds given in favour of Companies were against the system of Government and unfair to the railway customers. To show how the movement in favour of the British Companies was set up in England, we quote below a few of the statements made by eminent witnesses before the Select Committee. In answers to questions Nos. 5637 to 5643, Sir A. M. Rendel said—

"I believe that the Government can make and work railways as well as any outside agency, but I do not think it is desirable for the Government to undertake the work," i.e. "either make or work the railways. I think the Government of India has more to do and has less power to do it with, than probably any civilized Government in the world, and I think it should delegate everything that can be delegated, and it certainly can delegate railways. And I say that the Government of India is in a more favourable position for delegating than any other Government, because it has a very large body of retired officers who form the very best materials for agencies and I say that right thing is that companies should be formed under Directions made up of these retired officers with English commercial men in a given proportion, and that they should be entrusted with the construction of these railways, not as the property of the companies, but as the property of the Government.* I think it essential for the future of Indian Railways that they should be the property of the Government. I mean that the freehold of the railways should be in the hands of the Government."

"5640. Do you mean that the Government should own the railways

* The italics are editorial.

from the beginning, or take them over afterwards? No; I would have these companies construct the railways simply as contractors to the Government for their construction, and then I would let them take leases afterwards of the working of the railways for given periods; short periods, say of 20 years. Of course the leases might be continued upon such new terms as the circumstances of the time rendered reasonable. I say that because I think the class we want in India for the construction of the railways is the investing class, and not the speculating class. It would be a very serious matter indeed to let the concessionaire or the contractor into Indian Railways. I say the Government should make them, under an agency, as I have described, themselves. They can get the money on the best possible terms, much lower terms than any other agency."

"5641. What do you think of the Southern Maharatta contract; do you think that is a favourable one? That is the type I look for in future Indian Railway contracts."

"5642. In your opinion that ought to be the type of the future? Yes. We are simply the contractors of the Government for construction of that line, and find the money for the Government under the Government Guarantee; we are mere agencies for the obtaining of that money. I do not care in what form you put it, it comes back to that; we are simply an agency for raising the money and making the line for the Government."

"5643. So that of all plans yet adopted, in your opinion, that is the best? In my opinion, that is the best plan."

It may be noted that the late Sir A. M. Rendel was the Consulting Engineer of the Southern Maharatta and several other Indian Railway Companies, and that is why he used the plural pronoun "we" when speaking of the S. M. Railway Company's contract terms. Compare this opinion with that of Mr. Robertson, quoted at page 309.

General Strachey, R.E., C.S.I., F.R.S., explained the origin of the movement and the reasons given for it in his answers to questions Nos. 55 and 258 which have been reproduced in connection with the general question of State versus Company management in Chapter VIII.

In answer to further questions (No. 5830-5839) Sir A. M. Rendel gave the answers which are quoted below opposite each question:—

" 5830. You are proposing that companies should undertake the risk and the responsibility of making the railways? No, I am proposing that the Government should take the risk and responsibility under the guarantee.

" 5831. Which you have called a limited Guarantee? Enough guarantee to raise the money.

" 5832. Yes, but there is something beyond that; there is the management of the line? I would give a small share in the surplus profits.

" 5833. And you do not propose a guarantee that would of itself induce the public to subscribe the capital for the railway? Yes, I should offer just such a rate of interest as the Government can borrow at, independent of any railway advantages.

" 5834. Then they might borrow the money without reference to railways? They might.

" 5835. And then you propose that they should employ *individuals* to spend that money? To spend the money and to work the railway after it was made.

" 5836. Paying them what? Paying them this Guaranteed interest and a share of any surplus profits.

" 5837. But there is no occasion to pay them a fixed interest? Yes, there is.

" 5838. That rather complicates the matter; if the Government are to borrow the money, invest it themselves in railways, and then employ *individuals* to work their railway; that is your proposition? Yes.

" 5839. What should be the compensation to the *individuals* for working the railways? A share in the surplus profits."

The Italics are ours. The arrangement proposed above was that the Government of India should take all the risk, borrow the money, and employ *individuals* (forming the companies) to spend that money without any risk but with a share in surplus profits. The terms of the S. M. Railway Company's contract were admired, but let us see what another expert of no less weight said on this point. General J. S. Trevor, C.S.I., R.E., who was at the time Chairman of the B. B. & C. I. Railway Company and a Director of four other Railway Companies, and had been in the Railway Department of the Government of India since 1855,

winding up his career in India by being the Director-General of Railways, gave the following answers to questions Nos. 1696 to 1700 and 1723 to 1725 quoted below :—

"1696. How long ago was the contract made between the Southern Maharatta Company and the Indian Government? Two years.

"1697. Is that contract unique, is there any other contract of a similar character? It is a contract *on new lines altogether for a guarantee, and it is unique.*"

"1698. No other railways in India having had a guarantee of that sort before? None that I know of.

"1699. Have you any general opinion upon a contract of that kind, whether it would be applicable to all new railways which are guaranteed? I do not think it is a bad contract, the only thing is that *the Government cannot clear their interest until we earn 4½ per cent.*"

"1700. Do you mean that you think that the Government have not made good enough terms for themselves, because a witness here said he thought that the Government were a little too hard upon the Company and that they had stood out for rather too hard terms? I don't see that the terms are hard.

"1723. (Answer). The great objection to the old form of guarantee was that 5 per cent., was a sufficient return to the shareholders for their capital invested in the concern, and that they took little or no interest in its commercial success. To rectify that evil Government have given us a very low rate of guaranteed dividend, and they have given us a quarter of the profits all-round, without waiting any fixed sum to be earned; I think it is a very good contract, and on a very good principle.

"1724. Do you think that that principle should be extended to other companies formed for the construction of any other railways that are wanted in India? Yes, I think it might; it depends very much on circumstances, *it is rather an expensive mode of Government Guarantee.*"

"1725. Why? I think *it would be cheaper in a good part of India to subsidize a guarantee of 4 per cent. for some years after completion, but the Southern Maharatta must earn 4½ per cent., before the Government could clear their liability.*"

Then take the discussion which took place between Sir George Campbell and Sir Juland Danvers in the following

* The Italics are editorial.

questions and answers before the same Committee:—

6940. Sir George: "Do you not think the result of the guarantee system and the entrusting certain enterprises to private enterprise has hitherto been that it has cost the Government a great deal more than if the Government had made these works directly?" Sir Juland: "I think it is impossible to say positively."

6941. At all events the Government in every case in which they have taken over a line had to take it over at a premium? Yes.

6942. And in some cases they have taken over lines which were losing lines at a slight premium? Yes, but that does not prove, I think, that the lines would have been constructed cheaper or managed better if undertaken in the first instance by Government.

6943. Take the most recent lines and the most recent system, which have been very much commended to us what is called the South Maharatta plan; is not it the case that at the present moment the Government can borrow in market at $3\frac{1}{2}$ per cent, if not lower? Yes.

6944. Is not it the case, that practically the Southern Maharatta terms amount to a borrowing at 4 per cent., with the chance of additional profits and with the right reserved to the Company to claim back their money in case their profits should fall below the expected 4 per cent. in future? Those are the terms, but I may say that within the last month, the Southern Maharatta Company have raised money at $3\frac{1}{2}$ per cent., they have raised more than a million and a half at $3\frac{1}{2}$ per cent.

6945. That upon debentures? Yes.

6946. As regards the share capital is it the case that the Government, being able to borrow at $3\frac{1}{2}$ per cent; they have been obliged to give to this company 4 per cent., plus the chance of profits? Yes; it is only for a certain number of years.

6947. At the end of that number of years if the profits should fall below 4 per cent. or if the line should seem in any way unprofitable, the company are entitled in any year to demand back their money? That is to say, the Government get it at cost price.

6948. The Company are entitled to demand their money back?—Yes.

6949. So that the Company are practically guaranteed against at any time receiving less than 4 per cent?—No; less than $3\frac{1}{2}$ per cent.

6950. Is not it the case that they are guaranteed $3\frac{1}{2}$ per cent, plus additional half per cent?—For limited time.

6951. And at the end of that limited time they are entitled to call back their money?—Yes.

6252. So that they cannot be kept out of their money? No.

6953. Receiving not less than 4 per cent? They are not guaranteed 4 per cent. beyond seven years.

6954. And then their money back again if they want it? If they want it then.

6955. With the chance of obtaining a further profit if the line proves profitable? They are entitled to a quarter of the net receipts in addition to the $3\frac{1}{2}$ per cent.

6956. At all events it was made a good deal more expensively by this agency than if the money had been raised directly by Government, so far as the raising of the money is concerned? It is impossible I think to compare the probable financial effects.

6957. Will you tell us what you think are the advantages of employing a company under the terms of the Southern Maharatta Company? It relieves Government of such arduous work; it ensures the completion of the line within a certain period, and therefore insures economy of construction. I may say with regard to this very line the Government of India had commenced it, but they said they could not afford to go on with it except at a very slow pace. They could not afford more than 30 or 40 lakhs a year, and therefore the works would have probably taken six or seven years to complete. This Company has raised the money in the course of a year; they will probably complete it within three years; they are induced by the terms of the contract to expedite their operations so as to complete it as soon as possible, so that the country will have the advantage of that line three or four years sooner than if it had remained in the hands of Government, profits will be earned, and the capital made productive earlier.

6958. Would the Government have had any difficulty in raising the money at $3\frac{1}{2}$ per cent. and delegating some gentlemen selected by themselves to manage the line? They might not have had a difficulty, but would they have done it? They would not have done it.

6959. Why not? Because they probably would not have been allowed to increase the funded debt of the country for the purpose of carrying on public works at a greater rate than has been hitherto sanctioned.

6960. Do you mean that Parliament would not have allowed it? The Secretary of State, when the arrangement was made, felt that he was not in a position to sanction a larger direct outlay by the Government than was being incurred."

The points remarkable in this evidence are that while Government could themselves borrow at a rate lower than $3\frac{1}{2}$ per cent., they allowed over 4 per cent., to a Company that was at liberty to claim back its money at any time. This the Government did simply to relieve themselves of the "arduous work" of constructing and working railways by their own officers; while the Company has been constructing and managing the line with some of the officers borrowed from the Government, on *higher rates of pay and allowances* than those allowed by Government. This meant two open losses to Government, firstly extra interest; secondly higher salaries to officers. And the money raised by the Company was a debt, not against the Company, but against the Government of India.

Sir George Campbell, who took great pains to protect Indian interests during the sittings of that Committee, suggested some sort of Trust, but Sir A. M. Rendel would not have it. The following are the questions put by Sir George and the answers given by Sir A. M. Rendel:—

"5971. What I wanted to know is this, whether, with regard to your observation that there was great facility and advantage in delegating the charge of railways by the Government to some one else, and the opportunities which the Government have with regard to retired servants and the like, that does not point to some sort of trust, something in the nature of the Calcutta Trust; whether the Government might not make at least as good, if not better governing body, from among the retired officials, than a small body who would elect each other? I am by no means certain that the Government should not have a voice in the choice of Directors; but I think you will find it is settled practically between the Government and the Directors who shall be the new men, I suspect so: I do not know it.

5973. Have you ever thought of the question in connection with a Trust for these great railways? I would rather see a Company directly interested in the surplus profits. I think profits are a very great help to encourage good management."

So, Sir A. M. Rendel would not have a governing body better than the Calcutta Trust, but a small body of Directors, who would elect each other. In these discussions mention is made of

the interest and a share of surplus profits or of net earnings; but no hint is given of the indirect advantages which the Companies enjoy by the management of the large property, like the State Railways of India. These advantages must be greater than the direct gains; among them are—

- (1) The command over the railways;
- (2) Preferential employment of officials and grant of high salaries and allowances;
- (3) Preferential treatment of trade and commerce.

SECTION 3.—Financial Policy of Government, 1880-1884.

In his despatch * No. 1 (Financial) dated 6th January 1881, the Marquis of Hartington recapitulated as follows the principles, which had been previously laid down at different times, in respect to productive public works expenditure, to which the Government of India were asked to adhere:—

“(1) In the absence of private enterprise without subsidy or guarantee under satisfactory conditions, irrigation works were to be constructed by the State. Every encouragement was to be given to private individuals to undertake the construction of railways, if possible, without guarantee or subsidy; or if these were found eventually impossible, by some limited form of guarantee or subsidy, so restricted in respect to time and to the rate of interest guaranteed as to give the subscribers a real interest in the efficient and economical administration of the railway.

(2) No more than 2½ millions might be borrowed in any one year for productive public works.

(3) No more than two-and-half millions was to be expended on such works in any one year, unless there were surplus funds derived from revenues of the previous year, which it was thought desirable to appropriate for this object.

* Page 488-92, of Report of Select Committee of 1884.

or there was an unexpended balance of the money borrowed in preceding years, which might be re-allotted and added to the amount available in the succeeding year.

(4) A transfer corresponding to the amount of the surplus so expended must be made from the general debt to the productive public works debt.

(5) The question of constructing new railways was to be considered on commercial principles. No new line was to be undertaken unless there was a good prospect of its proving remunerative, that is to say, unless it could be fairly calculated to pay within a maximum limit of five years from the date of the line being open for traffic, 4 per cent. on the capital invested, including therein all arrears of simple interest incurred up to that date, and also the capitalised value of the land revenue and of leave allowance and pensions.

(6) In the case of irrigation works, commercial principles might be so far relaxed as to admit of their being undertaken, if they could fairly be estimated to prove remunerative in 10 years from the date of their completion on similar terms.

(7) Protective works which were unremunerative were to be constructed out of revenue and that the sum of £750,000 out of £1,500,000 of Insurance taxation for famine purposes would be sufficient for this purpose; that is both for protective railways and irrigation works.

(8) Works constructed under the pressure of war or famine did not come within the scope of the principles enunciated above. They were to be considered on their own merits, as the occasion arose.

(9) Before a project was sent home for Secretary of State's sanction, a survey and detailed estimate were invariably to be submitted and approved by Government of India.

(10) Whenever the amount sanctioned was found to be insufficient to bring the work to completion, fresh estimates were

to be promptly prepared and submitted for sanction.

(11) A programme of productive public works expenditure for the coming year was to be submitted for the Secretary of State's approval in the autumn of each year.

(12) Some of the principles herein laid down were avowedly of a temporary character, but, until they were modified, the essential point for the Government of India to consider, in connection with any particular scheme, which might be submitted for their adoption, was whether in the application of those principles, the facts of the case in question admitted of its being included in the class of productive works."

It may be noted that the direction laid down in clause (4) did not apply to deficits of interest and working charges, etc. paid out of the *general revenues* of India. Such losses virtually formed part of the capital expenditure and should have been added to the capital account, according to the principle which has been subsequently adopted, *vide* page 303.

In para. 4 of the Despatch, it was noted that the reasons for fixing the limit of expenditure at 2½ millions sterling were explained by the Under Secretary of State for India (Mr. Stanhope) "in the House of Commons on 22nd May 1871, to be, that as it had been decided that money required for public works should be borrowed in India and not in England, the amount should be limited to that which the Government of India could fairly be expected to borrow in ordinary years, without undue disturbance of the money market in India."

As regards the expenditure of surplus revenue, Lord Hartington remarked "there appears to be no reason in principle why, in the event of a *bona-fide* surplus of receipts over expenditure being realized in any one year, and not otherwise appropriated, any such surplus should not under certain conditions to which I will allude presently, be added in the following year to the amount borrowed for expenditure on productive public works." "It will be, in the first instance," continued His Lordship, "for your Excellency to judge whether it

will be desirable to devote the surplus to this purpose, or whether it will be preferable to undertake the construction of works which, from their unremunerative character, cannot be classed as productive, or to apply the funds at your disposal to the remission or readjustment of taxation, or to the reduction of sterling debt, or to the diminution of the amount borrowed in India for productive public works. In deciding on the adoption of one or more of these alternative courses, much will depend on the circumstances of the moment, and I do not wish to lay down very precise rules as to the proportions in which surplus revenue should be applied to these several objects. I will merely observe that, equally with my predecessors, I attach great importance to the reduction of sterling debt in years of prosperity; but in the event of any appropriation of surplus revenue to productive public works expenditure, I must impress on you a strict adherence to the conditions under which the surplus of any one year may be added to the amount borrowed in the succeeding year for productive public works indicated by the Select Committee of the House of Commons, *viz* :—

- 1stly.—That the general debt of India should be relieved, and the productive public works debt increased, by the amount of the surplus so added,
- 2ndly.—That care should be taken that the permanent establishments be not increased so as to prove burdensome in years when no surplus of preceding years is available." (Para. 4.)

The limit of $2\frac{1}{2}$ millions, as a limit of expenditure and not of borrowing, applied to average annual expenditure; that is to say, the unspent balance of any one year might be re-allotted and added to the $2\frac{1}{2}$ millions of the succeeding year, if there were good grounds for supposing that the whole sum could be profitably spent.

In their Despatch No. 92 (Railway) dated 22nd July 1881, the Government of Lord Ripon addressed the Secretary of State in regard to the construction of public works intended to secure

increased production and protection against famine, in connection with part II, chapter V, section IV of the Report of the Famine Commission of 1880, in para. 9 of which it was noted that a length of 20,000 miles of railway would meet all possible demands likely to be made on them for the distribution of food in time of scarcity; of this nearly one-half had already been completed or was under construction. This rough estimate of the length of railway was, however, in their opinion greatly in excess of the probable needs, and they thought 5,000 miles in addition to the existing lines (9,000 miles) would go far to remove all future risk of serious difficulty in supplying food to any part of any district in the whole country.

The Government of India recommended the provision of 3,000 miles of new railways in the course of the next 4 or 5 years, through private capitalists upon a guarantee of interest limited both in amount and in duration; that the interest to be paid under that scheme might fairly be charged against the 75 lakhs a year which it had been determined to devote to the construction of Protective Works out of the famine grant. Appended to their Despatch were two minutes, one by the Hon'ble Major Sir Evelyn Baring (now Lord Cromer) and the other by the Hon'ble Rivers Thompson, (whose Minute we have already quoted at page 300) the former strongly opposing and the latter backing up, the proposal of the Government of India to meet the interest on new guarantees proposed to be given to railway companies out of the annual moiety of the 75 lakhs of rupees of the special grant from the Famine Relief Taxation.

The Hon'ble Major, who was at the time Finance Minister to the Government of India, thought that the moiety of that allotment should not be diverted from the particular object for which that taxation was raised, *viz.*—the relief of famine itself, and accordingly he was of opinion that the whole of the 75 lakhs should be spent on irrigation canals and tanks but not on railways; that private enterprise might be enlisted on moderate terms for the construction of the necessary railways and if such

enterprise would not come forward, the guaranteed interest might be paid out of the railway revenues which showed improvement year after year. The policy he advocated was :—

- (1) To substitute private enterprise with a minimum amount of Government aid for State Agency in the construction of railways;
- (2) To devote the 75 lakhs. which constituted one-half of the Annual Famine Insurance Tax, to works of irrigation;
- (3) To stop borrowing so soon as the works then under construction by the State were completed and to devote surplus to the reduction of debt.

In putting forward these proposals he added that "I am fully aware of the responsibility which develops upon me in opposing a scheme which is supported by the high authority of His Excellency the Viceroy and the unanimous voice of my Hon'ble Colleagues. At the same time the subject is one to which I have given so much thought and attention that I should be failing in my duty, were I not to lay before Her Majesty's Government an alternative and as I think, preferable course of procedure."

As might be expected after reading the dissenting Minute of the Hon'ble Sir Evelyn Baring, the Secretary of State did not agree to the proposals of the Government of India. The Marquis of Hartington's objections to Government of India's proposals were "that a guarantee of interest upon a capital estimated to amount to Rs. 1,835 lakhs would impose a liability on the revenues of India which was certainly not contemplated" when the principles recapitulated in the Despatch of 6th January of 1881 were laid down; that to formally allocate a sum of £500,000 from the Famine Insurance provision to meet interest charges on capital used on railways would be inconsistent with the intentions with which this provision was made. To these objections the Government of India did not send a direct or immediate reply, but after a lapse of 13 months, they wrote a fresh letter No. 29 (Railway) dated 23rd January 1883, in which they proposed a

possible sum of £27,550,000 for lines left to unaided private enterprise, and a total sum of £32,082,000 to be raised directly by Government or under guarantee and spent in the construction of Indian Railways during five years immediately after sanction.

The Hon'ble T. C. Hope, member for Public Works, at the same time recorded a separate minute, proposing to place the Imperial Public Works Administration in respect to the whole of its transactions, upon a contract basis analogous to that of the quinquennial agreements with Provincial Governments. He proposed that the next deficit in the annual railway account estimated to be made good from the general revenues in the current year, or at any rate that for the year in which the new policy was to take effect, ought to be taken as the fixed grant for the coming 5 years, and that the whole of the growing 'productive' receipts should go towards the new obligatory expenditure of railways. Stated in another form, the matter was explained thus: "The Financial Department had never except in the famine year 1877-78, had any surplus railway receipts for the benefit of the general tax-payer, until the year 1881-82 and 1882-83. Since such receipts had begun to accrue, it was proposed that the tax-payer, should for the present be content with an indirect benefit from them, instead of a direct one. Let railways breed railways; and canals too, if money could be spared from the railway requirements." But this view ignored the fact that the general tax-payers of India had already paid by that time 71 crores of rupees in the shape of interest, surplus profits, supervision, cost of land and loss by exchange on account of the existing railways from 1849 to 1884. On this huge outlay a substantial return was due to the tax-payer. The proposal of the Public Works Minister was rightly rejected by other members of the Government of India Council, though it was forwarded to the Secretary of State for consideration.

The Secretary of State, Lord Kimberley, in his Despatch No. 5 dated 16th August 1883, after examining the proposal of the

Government of India, which according to his calculations involved an expenditure on the average not far from 2½ millions annually, for the 5 years on new railways for India, and noting the two main considerations which appeared to have weighed with the Government of India, namely a sense of the necessity for the speedy construction of such railways as were urgently required for giving the country protection against famine, and the desire to attract private enterprise to railway construction in India, wrote (para 17) that "the proposals now before me are of so wide a scope, amounting as I have already observed, to a reversal in some respects of a policy which was approved and recommended by the Committee of the House of Commons in their Report in 1879—they affect so many questions both as to the form which increased expenditure of this description should take, and as to the future liabilities of your Government—that it appears to Her Majesty's Government especially having regard to the important recommendations of the Famine Commission with respect to railways, which have been made since that Report, that it would be undesirable to authorise their adoption in whole or in part without renewed Parliamentary inquiry."*

The main points of difference of opinion between the Government of India and the Secretary of State for India were explained by Mr. Henry Waterfield in his answer to question No. 6085 before the Select Committee of 1884 as follows:—First, the Government of India desired as far as possible to exclude the action of the State from the construction of productive lines, a policy to which the Secretary of State did not assent; Secondly, the Government of India wished to adopt a scheme for the construction within 5 years of nearly 4,000 miles of railway, which although a large portion were expected to be productive, they described as being, relatively speaking unprofitable, but which, they considered to be indispensable for protection against famine or other urgent purposes, and with this object they desired to give temporary guarantees for such lines; Lord Hartington in

*Page 549 of Report of Select Committee of 1884.

1881, in reply to a similar proposal, said that he was not disposed to admit that the true interests of India would be best secured by such a measure, but Lord Kimberly considered that some relaxation of the existing rules might be permitted; Thirdly, the Government of India desired to capitalise a part of the Famine Insurance grant, borrowing money for certain unproductive but protective lines, and charging the interest against that grant. The Secretary of State considered the application of any part of the Famine Insurance grant to some of those lines to be inadmissible; Fourthly, the Government of India wished to adopt a policy involving the outlay of 32 or 33 millions in five years, while the Secretary of State declined to accept such an expansion of the operations.

SECTION 4.—Recommendations of the Select Committee of 1884

The differences of opinion between the Secretary of State and the Government of India necessitated the appointment of a Select Committee of the House of Commons as stated in Lord Kimberly's Despatch of 16th August 1883. Accordingly a Select Committee was appointed on 12th February 1884. It consisted of 19 members and was presided over by the Right Hon'ble William E. Baxter. The Committee sat for 21 days in London between 12th March and 10th July, examined 25 witnesses* all of whom were Europeans—Government Officials, capitalists or members of British commercial Bodies. There was no Indian either on the Committee or among the witnesses examined. They drew up their Report unanimously on the 18th July 1884.

The questions referred to the Committee were the "alleged necessity for more rapid extension of railway communication in India and the means by which this object may be best accomplished." The Committee made the following recommendations:--

* Besides the official evidence, the Committee considered the memorials of the Bengal, Madras and Bombay Chambers of Commerce, and the East India Association, and they examined representatives of the Liverpool and Manchester Chambers of Commerce, and many other witnesses acquainted with the trade of India (para. 16 of Report of the Committee).

That the evidence in favour of a more rapid extension of railway communication was conclusive. (Para. 20 of Report).

2. That all the leading trunk-lines with the principal feeders should be on the broad-gauge, the metre-gauge being as a rule confined to tracts of country where that system is already in successful operation, and to local lines where the traffic is likely to be so light that cheapness of construction more than counterbalances the undoubted disadvantages of break of gauge (Para. 21).

3. To accomplish a more rapid extension of Railway Communication it was desirable to employ both agencies of State operations and companies (para. 22).

4. That the time might come when new railways would be made in India by unassisted private enterprise, and that this should be kept in view in all contracts made by the State (para. 23).

5. Noting the terms concluded with the B. & N. W. Company, the Bengal Central Company and the Southern Maharatta, the Committee pointed out that each was suitable under certain conditions; that in future contracts, the option of demanding the repayment of the company by one year's notice should not be unconditionally given.

6. That simplicity of terms was of great importance in inducing companies to make new lines; that all possible publicity should be given both in India and in England to the projects which Government wished to be undertaken by Companies; that negotiations should be conducted as expeditiously as possible, so as to avoid all unnecessary delays in arranging contracts; and that the accounts of the financial results of railways in India should be kept in such a manner and so published as to be easily available to and understood by the investing public (para. 26).

7. That the Government should retain in their own hands a power of fixing or from time to time varying, the maximum of fares and rates, subject to adequate provisions to secure the interests of investors (para. 27).

8. That the technical distinction between protective and productive lines could not be maintained, that railways needed for

protection from famine or for the development of the country, be made as required. The Committee did not approve of the entire removal of the existing check upon the construction of unremunerative railways as suggested by the Government of India. The Committee was strongly of opinion that the bulk of the railways made should be self-supporting (para. 28).

9. That the mischief occasioned by constant fluctuations of policy in the construction of railways, required that a careful forecast having been made of future requirements for public works over a considerable term of years, such a scale of expenditure upon railways should be adopted as could reasonably be maintained (para. 29).

10. That the amount proposed to be spent on railways by the Government of India during the six years was moderate and that, looking to the experience of past years, and to present prospects, there was a very fair ground for expecting that an extension of the railway system of India on the scale proposed would have most beneficial effects (para. 30).

11. That if the capital required could be *really obtained from Indian sources*, the advantages of borrowing there as compared with borrowing in England, would be very great. The growth too of the sterling debt in times of war or famine, and the difficulty of reducing that debt, even in prosperous years had been clearly demonstrated in the evidence and the Committee thought also that for political as well as for financial reasons, it was desirable that loans should, as far as possible, be raised in India; but they did not believe rupee loans, which were not really absorbed in India, differed materially in their effect upon exchange from sterling loans, as, if held in Europe, the interest upon them would probably be remitted from India and would come into the exchange market. They would therefore recommend, quoting the words of the Report of the Select Committee of 1879, that when 'the difference between the rates of interest in India and in England is so considerable as to afford full compensation for the great comparative disadvantages which inevitably attend

borrowing in this country' (England), the Secretary of State-in-Council should not hesitate to borrow such moderate sums in this country as would enable the Government of India to complete such public works as should have obtained his sanction (para. 31).

12. With regard to the recommendation of the Government of India that interest on the sums spent on productive and protective railways, should be partly provided by hypothecating £200,000 of the Famine Grant, the Committee were of opinion that 'any such application of any portion of that grant would be entirely contrary to the purpose for which the fund was created, and they' could not 'concur in this suggestion' (para. 32).

13. Whilst expressing an opinion that the present limit of borrowing, fixed by the Committee of 1878-79, at £2,500,000 might safely be enlarged, the Committee thought that the full responsibility of deciding upon the amounts to be borrowed from year to year should rest with the Secretary of State-in-Council.

14. In making their recommendations, the Committee wished 'most emphatically to endorse the declaration of the Government of India . . . that the proposed extension of railways should not involve additional taxation' (para. 34).

In passing their opinion in favour of employment of Companies, the Select Committee of 1884 gave their reasons in the following terms:—

"State operations are according to the present practice, limited to the strength of the Public Works Department, the permanent staff of which it is not desirable to increase for reasons given before the Select Committee of 1878-79, which reasons your Committee fully endorse. On the one hand, money can be raised more cheaply by the State, on the other, construction and working by Companies does not necessarily involve any increase of the Staff of the Public Works Department, and it relieves the Government of India of a somewhat onerous charge; besides which, the emulation between *quasi* private enterprise and Government working tends to promote economical construction and management."

As regards the staff of the Public Works Department, the Select Committee of 1879 recorded their opinion that "the existing establishment of Europeans" was too large for the

work they had to perform, and would be "still more in excess under the reduced expenditure on public works proposed for the future. Further the heavy cost of their maintenance reduced largely the profits otherwise attributable to the works with which they are connected." The Committee therefore recommended that "the members admitted to Cooper's Hill with a view to their employment in the P. W. Department, should be carefully adjusted with regard to the future requirements of the service, and that the establishments in India should be at once reduced."

This recommendation was for a reduction of the superfluous staff of European Engineers. It did not preclude the employment of the necessary number of officers for the State Railways. Another reason for the reduction of European Engineers which that Select Committee gave was that—

"Native employees are more becoming efficient assistants, and there is much reason to hope that a cheaper native agency may to a considerable extent be substituted for a part of the European Agency hitherto employed."

Public Works Department Officers on State Railways are not absolutely necessary and may with advantage be discontinued, and the Engineering establishment for State railways recruited on the same terms as the officers of the State Railway Revenue Establishment are. The officers employed by the companies are paid entirely out of the Government moneys and there would have been and would still be a saving in the cost, if the officers, on the above-mentioned terms and conditions, be employed by Government itself.

It is questionable whether the Government of India actually needed relief from what was described as "a somewhat onerous charge." It is one of the functions of a government, which the Government of India most successfully performed between the years 1869 and 1879, and have been performing it since then. The Governments of many of the Continental countries, the Governments of Argentine, Brazil, Chile, China, Egypt, Japan, South Africa, New Zealand, Australia are performing them.

There is no reason why the Government of India and the Provincial Governments should not do the same. Whatever difficulties may have been experienced in 1878-1879 on account of the Afghan War, no difficulties are likely to occur if the administrative control of Indian Railways be placed under the Provincial Governments assisted by Legislative Councils as suggested in Chapter II, pages 113-16.

For our criticism of other grounds given by the Select Committee of 1884 in favour of employing companies, see Chapter VIII.

The direction of the Select Committee of 1884 marked the **Third Epoch** in the History of the Indian Railways—the entrusting of the Administration of State Railways to Boards consisting of retired officers of the Government of India and British capitalists residing over 6,000 miles away from the scenes of operation. This policy was started in 1879 without Parliamentary authority but was formally authorized by the Parliamentary Committee in 1884.

With the change of policy initiated by Lord Salisbury in 1877, not only was the working of the E. I. Railway given back to the same company after the purchase of the line in 1879, but the Darjeeling Himalayan Company was newly formed in 1879, the Dibru-Sadia in 1880, the Bengal Central Company in 1881, the Bengal and North-Western and the R. & K. in 1882. Three other companies—namely the Deogarh, the Thaton-Duinzaik, and the Tarkessur—were formed in 1883.

Although the facts and arguments placed before the Select Committee of 1884 demonstrated the superior advantages and economy in costs under State construction and State management of railways in India over these operations through the agency of companies, still that Committee decided that it was desirable to employ both the agencies. This recommendation practically reversed the policy of State construction and State management, which was deliberately adopted by unanimous agreement by the Secretary of State and the Government of India in 1869, and confirmed by the Select

Committee of the House of Commons presided over by Sir George Hamilton in 1879. That sound system has been gradually checked from 1884 and a greater start given to British Companies.

Under the policy of 1869, private companies were not to be employed, unless they undertook new railways on their own risk and responsibility, without guarantee from Government. After the decision of the Committee of 1884, Companies *taking no risk* have found a free opening for exploiting India. The capitalists of England marked out the best of the State railways which were already open, giving very satisfactory results in the hands of the Government, and took steps successfully to secure such lines for themselves. The Select Committee's decision of 1884 gave a marked encouragement to the employment of British Companies, the promoters of which were already hatching plans both in England and in India to secure the profitable lines. The companies referred to are those occupying the status of agents of Government for the working of State railways already made and profitably worked by Government, and for the construction and working of new lines of State railways. The companies have got an upper hand and the State agency has been set back.

The E. I. Railway, on purchase by Government in 1879, had already been made over to the same company again for working purposes. The same advantage was accorded to the South Indian Railway in 1890, to the G. I. P. *cum* I. M. R. in 1900, to the B. B. & C. I. in 1905, and to the Madras Railway in 1908. These, it may be noted, are the old Guaranteed railways acquired by Government at heavy prices as shown in Chapter III, and have been made over to the companies again for working purposes.

The Rajputana Malwa State Railway, which was described, by the late Sir A. M. Rendel, as a wonderfully profitable line, with the cheapest administration in the world, was snatched away from Government administration by the B. B. & C. I. Railway Company, which was at that time one of the old guaranteed companies, from 1st January 1885, just six months after the conclusion of the sittings of the Select Committee of 1884.

Several of the other State Railways have similarly been leased to other companies, *viz*—

1. The Sindhia State Railway from Agra to Gwalior, opened in January 1878, and the Bhopal-Itarsi State Railway, were taken over by the Indian Midland Railway in 1885 and 1889 respectively, this company having been newly formed in 1885.

2. The Nagpur-Chhattisgarh State Railway was made over to the Bengal-Nagpur Railway Company, which was newly formed in March 1887 to construct certain new lines on behalf of Government.

3. The Tirhut State Railway, opened in 1875, was made over in 1890 to the Bengal and North-Western Railway Company, which had been started as a Subsidized company in 1882.

4. The Lucknow-Bareilly State Railway, opened in 1884, as a Provincial Railway, was made over to the R. & K. Company in 1890.

5. The Rangoon and Irrawadi Valley State Railway, originally opened in 1877, was made over to the Burmah Railways Company newly formed in 1897.

These are some of the State Railways which were constructed by Government before or soon after 1880, and were profitably working under Government management upto the time they were made over to the Companies. The decision of the Select Committee of 1884 was unfortunate for India. It did not read as much as has actually been done under its authority, with the great influence which the British Companies have always exercised with the authorities in England and India.

Thus the sound policy of constructing and working Indian Railways through the agency of the State, introduced in 1869, was reversed in 1884, under pressure from English capitalists and some of the officials of India, the former upto the sixties when the railways were being indifferently worked by the old Guaranteed companies with unsatisfactory results, would not invest their Capital in new railways in India without a guarantee of high interest, but when they saw the profitable character of these railways

brought about by the development of trade and the healthy emulation created by the State railways by lowering rates and fares to attract the traffic, those very capitalists in the early eighties, when 4,500 miles of State Railways were open to traffic and 3,178 miles were under construction directly under the State Officers, wished not only to construct new railways but also to buy the State railways out-right from Government, and their proposals for their purchase were under Government consideration, as is evident from clause 67 (12) of the Government of India Despatch No. 29 (Financial), dated 23rd January 1883, page 522 of the Report of the Select Committee of 1884. The idea of selling the State Railways was postponed, so that their profits might cover the interest for the unprofitable lines the Government were going to construct. But the best and most paying State railways were made over to the companies for working purposes, a step which can in no way be regarded as beneficial to the Indian tax-payers, who according to the Select Committee had up to the end of the year 1884, borne an aggregate working charge of 71 crores of rupees, in addition to the capital cost of the railways.*

SECTION 5.—Further Efforts of the Companies.

Not content with the undue advantages gained under the recommendations of the Select Committee of 1884, the companies working the State Railways have had their position greatly strengthened since. As shown in Section 5 of Chapter VII, their powers with regard to Rates and Fares have been unduly increased since 1900. They made efforts to acquire the remaining Indian State Railways which are under direct management of the State but have failed. After the Select Committee of 1884, the first effort openly made by the Companies was when the Secretary of State for India sent out Mr. Thomas Robertson C. V. O. as a Special Commissioner for Indian Railways in 1901. The Companies are practically masters of the State Railways they

* Para. 18 (1) of the Report of the Select Committee of 1884.

hold on lease without incurring any risk. Under the contracts, however, the Government have powers to exercise control over their administration. This control was exercised through Government Consulting Engineers and Examiners of Accounts, who according to the Special Commissioner, were a body of conscientious, zealous, and capable gentlemen.† Their duties however, required them to bring up irregularities and short-comings of the companies' working; those officers had therefore become "vexatious" to the companies, who prevailed upon Mr. Robertson to write that the control exercised by those officers was "a fifth-wheel to the coach" and should therefore be abolished. We must confess that the Government were very ill advised in this matter and accepted the recommendation of the Special Commissioner, with the result that the companies are now totally uncontrolled. Mr. Robertson's proposal was based on the ground that interests of the Government and the Companies were identical, that neither the Government nor the public would suffer by the entire withdrawal of such control.‡ Here we disagree with the Special Commissioner. It is too well known that the companies seldom if ever care for public interest. Their action in cutting down train services and in raising the passenger fares during the recent years supports our view. Not only this, Government money is lavishly spent on companies' lines in various ways, over which no check is exercised either by Government or the companies. If such unnecessary expenditure were stopped, there would be no need for raising the fares.

Mr. Robertson was totally wrong in thinking that "the interests of the Companies and the Government are in harmony." See the contrary opinion of his own recorded at page 309. Government represents the public, and the interests of the public and those of the Companies are not alike. The Companies, as stated by Mr. Robertson himself, will raise the Share-holders' dividends, the public desire greater comforts and conveniences

† Page 12, para. 12 of the Report of 1903.

‡ Para. 45 of the Report of 1903.

which are sure to keep down the dividends. The Companies will keep the higher appointments for their countrymen and will pay them high salaries; whereas the people of India want such appointments for themselves, and at lower rates of salaries which would benefit the whole country. Paras. 41 to 45 of Mr. Robertson's Report were based upon wrong calculations. We are sorry that the Government accepted his recommendations regarding the abolition of the Government Control over the Companies, exercised through the Consulting Engineers. His para. 39 clearly states that the Companies' officers desired to have that control over their actions removed.

The other points they gained were through the Mackay Committee of 1907-08, *viz*: Increased allotment of funds from Government for their capital expenditure, and the extensions of their contracts under the new scheme for dividing surplus profits between the companies and the Government. They also succeeded in securing the following recommendations :—

1. By the Special Commissioner of 1901-03 that the Government should lease *all* State Railways to companies.*
2. By the Committee of 1907-08 that one or more of the State lines worked directly by the Government of India should be leased to companies formed under the new scheme formulated by the committee †

Both these recommendations, we are glad, were rejected by the Government.

We have not been able to trace what led the Secretary of State for India to send Mr. Robertson out as a Special Commissioner for the Indian Railways in 1901, but from the Report of the Mackay Committee, we learn that in March 1907, the Secretary of State received "two deputations from the Indian Railway Companies, and from the East India Merchants respectively, on the subject of the inadequacy of the existing arrangements for railway traffic in India," upon which he appointed the Committee

* Para. 78 of the Report of 1903.

† Para 35 of the Committee's Report of 1908.

consisting of the following gentlemen:—

Sir J. L. Mackay, G.C.M.G., K.C.I.E., Chairman,
Sir Walter Roper Lawrence, Bart, G.C.I.E.,
Sir Felix Schuster, Bart,
Sir David Miller Barbour, K.C.S.I., K.C.M.G.,
L. Abrahams, Esqr.,

to enquire and Report—

- (1) Whether the amounts allotted in recent years for railway construction and equipment in India are sufficient for the needs of the country and for the development of its trade; and if not, then—
- (2) What additional amounts may properly and advantageously be raised for this purpose;
- (3) Within what limits of time, and by what method, they should be raised;
- (4) Towards what objects should they be applied, and
- (5) Whether the system under which the Railway Board now works is satisfactory, or is capable of improvement, and to make recommendations."

It may at once be remarked that this committee was appointed at the instance of the Railway Companies, backed up by the European merchants engaged in the exploitation of India. Although complaints have been continuously made by Indian people of the inadequacy of the existing arrangements for the comforts and conveniences of Indian passengers and the requirements of Indian merchants, yet no Indian was either appointed on the Committee or called by the Committee to represent Indian views. There was no dearth of competent Indians for this service. Gentlemen like the late Mr. G. K. Gokhale, the Hon'ble Sir Ibrahim Rahimtulla, the Hon'ble Pandit Madan Mohan Malviya, to mention a few, were available by hundreds. The Indian opinion was not only ignored in this manner but the whole work of the Committee was so secretly carried out that the Indian public hardly knew what the Committee was, what were its objects, and why and how it was appointed.

On the 5th of March 1908, the Committee made its Report to the Right Hon'ble John Morley, O. M., M. P., Secretary of State

for India, in which it was stated that "they held 18 meetings and examined 34 witnesses, representing commercial, railway, financial and official views and also had the benefit of opinions and suggestions from members of the Government of India, the Chairman of the Railway Board and certain of the (European) Chambers of Commerce in India; and made several recommendations, from which we take here those contained in paras. 24 and 25 of their Report.

The Committee pointed out that the development of the Indian Railway system would be expedited, if arrangements were made that some lines now dependent on Government capital, should in future supply their capital requirements, without Government intervention or assistance. A scheme with this object was suggested by Colonel T. Gracey, Sir H. Kimber and Sir W. Bisset. In broad outline it was—

1. That the net earnings of a railway owned by the Government be capitalized at say 25 years' purchase;

2. That the amount thus arrived at be treated as Government capital in the undertaking;

3. That a company be then formed to work the line, and that this company should raise additional capital on the security of the railway alone, without any guarantee from the Government;

4. That the net earnings of the line, after the formation of the company be divided between the Government and the company in proportion to the capital of each. The rate of dividend on the assumed Government capital and on the company's capital would always be the same (para. 24).

This plan has been adopted in the revised contracts made with the S. I. Railway Company in 1910, with the M. & S. M. Railway Company in 1911, and with the B. B. & C. I. Railway Company in 1913. The effect of this is that the companies, raising capital at that late stage share equally with the State in the profits of the property, which has been built up at the entire expense of the people in the unprofitable days at enormous costs as shown in appendix 8. We do not approve of any such mixture of non-

Indian Capital in the State property.

The *fixed* rate of valuing the great *rising* property of the State is wrong. The surplus profits are worked out yearly but there is no provision to make good any deficiencies out of the Company's share of the profits in a subsequent year in the first two contracts.

As regards the lines worked directly by Government, *viz.*—the North Western, the Eastern Bengal, the Oudh & Rohilkhand, and Jorhat (Assam), the Committee pointed out that “large capital expenditure for development must be incurred on these lines in the near future and direct working by the State was not without its disadvantages, that the consistent policy of the Government of India for many years had been to arrange for the railways in India, while remaining State property, to be leased to companies which work them on behalf of the Government on a profit-sharing basis, that there was no disposition on the part of the Government, to depart from this policy.” The Committee therefore suggested that “one or more of the State lines mentioned might be leased to companies on the basis above described,” and “that its contracts with the companies should be for a long period, even up to 50 years” (para. 25).

Will any body say that these recommendations are for the good of India? We find nothing in the recorded evidence to support the Committee's statement regarding the “disposition” of the Government. The Committee did not at all consult Indian opinion and ignored the interests of the people.

We are, however, glad that the proposed lease of the lines was not carried out. The general public in India did not know that such a recommendation had gone forward, from the committee, while there were rumours in the newspapers for the sale or lease of the Eastern Bengal and the Oudh and Rohilkhand State Railways to some British Companies.

It is remarkable that proposals of this magnitude, injuriously affecting the financial interests of India, were brought up by the Committee, supported by witnesses from interested quarters.

Similar proposals were previously carried out by the Secretary of State without any notice or consultation with the people or representatives of the people of India. Public opinion in India has now become conscious of the injuries inflicted to Indian interests in this manner, and we trust the administration of Indian Railways will be put on a sound footing soon.

It is surprising to read in para. 26 of the Report of that Committee that a high official of the Government of India, who was the Chairman of the Indian Railway Board at that time and has since taken up the Chairmanship of a Railway Company, suggested that "after the capitalisation of the net earnings as in the scheme described above, a portion of the Government capital might be transferred to the company for a cash payment, thus placing the Government in possession of funds which could be utilized for railway purposes elsewhere." Under this scheme "the Government," he added, "would sell outright a portion of its property in the railway to the company." "Such a sale should," the Committee however opined, "be avoided" on the ground that the "State would, in respect of the share of the capital transferred to the Company, lose the benefit of this improvement for all time, and it would be found ultimately that the Government was practically paying an extravagant rate of interest on the money obtained from the Company." This objection applies equally to the admission of companies' capital on profit-sharing basis, especially as the old losses of the railways are not counted on the Government side.

A similar proposal was made in 1883, see page 334 *supra*. The Railway Board should note that the people of India will not consent to sell the national property on any terms.

Not satisfied with the gains they have been making from the management of the State Railways, which they have secured with undue influence with the authorities in England and India, the capitalists of England endeavoured to buy the railways outright, which would perpetually deprive the people of India of their due benefits from the national property which they have provided at heavy cost and after defraying heavy losses during their early days. The conduct of Government officials who made the

proposals for the sale of such public property is highly censurable. Could such officials be considered loyal to India, whose salt they have been eating? While other nations of the world are buying up and nationalizing railways where they are owned by companies, here in India some of the influential officials entrusted with the management and working of the State Railways, have been working against the true interests of the State, by bringing about or attempting to bring about the transfer of the State Railways from the direct control of the State to that of the British Companies under one pretext or another. This is directly against the decided policy of Government as adopted in 1869 and repeatedly declared on various occasions since. In India Railways generally constitute a monopoly, as competing lines have not been allowed by Government to be constructed. In the interests of the community all monopolies should be in the hands of the Government.

Encouraged by the victories obtained by them and their European officers, through Mr. Thomas Robertson, C.V.O. in 1901-02, and through the Mackay Committee in 1907-08, the Railway Companies prevailed upon the Secretary of State for India to send Lord Inchcape (formerly Sir James L. Mackay) out to India again in the cold weather of 1911-12, when he held a secret conference with the Chairman of the Railway Board and other officers of Government on the one hand and the Agents and some of the Directors of the several railway companies on the other, no public announcement having been made by Government as to the nature of the work which was to be done at the Conference. The visit of Lord Inchcape was, however, vaguely announced in some newspapers, with confictory statements as to the objects of his visit. On the 23rd of February 1912, the Hon'ble G. K. Gokhale in the Viceroy's Legislative Council moved "that this Council recommends to the Governor-General in Council that all papers and correspondence relating to the appointment of Lord Inchcape to conduct his present inquiry into the Railway Administration of India, which may be in the

possession of the Government of India, be laid on the table of the Council." In making the motion, the Hon'ble Mr. Gokhale enquired why no official statement was made at any stage of the proceedings on the subject, what was exactly Lord Inchcape's position in India, and whether the Government of India were consulted before the enquiry was ordered. He remarked that if the Secretary of State was to send out an officer of his own or a private individual like Lord Inchcape "to make an enquiry into matters of administration, independently of the Government of India, and if the results of such enquiry were to be communicated direct to him, he must say that this would be a dangerous innovation, opening the door wide to serious complications." He objected, in principle, to an enquiry into any grievances of the railway companies being entrusted to Lord Inchcape, who was a senior partner of a big commercial house in India, having extensive dealings with Railway Companies.

The Hon'ble Mr. Mudholkar, who had also proposed to put certain questions in regard to the origin, scope, constitution and methods of the inquiry which Lord Inchcape was deputed to make, supported the resolution moved by the Hon'ble Mr. Gokhale. He gave voice to the complaints of the public and to the extreme dis-satisfaction with which the appointment, constitution and proceedings of the deputation had been regarded by all classes of the people in India. "The railways," he remarked, "are amongst the most valuable concerns of the country, and it has every right to say that on such important matters, there should be no deliberations in camera, that no discussion of policy, means or procedure should be conducted without a due representation of the people and that persons qualified to speak were heard. He observed that although the Secretary of State by the letter of the law had powers, but usage, public convenience, and official *etiquette* demanded that he should not interfere in matters in which the Government of India could grant redress or take action, that the terms of reference should have been published, the secrecy which had been kept was utterly

uncalled for, highly unsound and wrong in principle, that the Committee should have included representatives of the Indian people, i.e. of the great interests which exist in this country, and that the inquiry ought to have been made publicly and evidence of experts and informed persons invited.

The Hon'ble Mr. Clark replying on behalf of Government, said "I quite agree that if Lord Inchcape had come out here to conduct so large a matter as an enquiry into the whole railway administration of this country and no official explanation whatever had been given, that would have been a very extraordinary thing, and the Hon'ble members would have had a very good reason for pressing Government on the subject. But nothing of the kind has been done. There has been no Committee, consequently there have been no terms of reference, and there has been no inquiry of any sort at all. . . . certain questions were outstanding between the Railway Board and the Railway Companies. It seemed better to the Secretary of State that these questions should be dealt with by a conference rather than by correspondence which is apt to be prolonged. The Secretary of State therefore thought that matters should be discussed by a conference in India. Lord Inchcape was coming out to India in any case this cold weather, I believe, and it was arranged that he should act as Chairman of the conference. The conference consisted of several Chairmen of the Companies and of the Railway Board. The conference met and discussed the objects at issue with entirely satisfactory results. The conference was of an entirely informal nature, and the Government of India do not think it necessary to lay any papers on the subject upon the table of the House."

The Hon'ble Mr. Gokhale in closing the debate remarked that as the purpose of his motion had not been met by the answer given by the Hon'ble Mr. Clark, he must press for the resolution being put to the vote. The Council divided:—19 Indian members (11 Hindus, 8 Musalmans) voted for, and 38 members mostly officials and Europeans, (the only non-official Indians being the Hon'ble Mr. Dadabhoy and the Hon'ble Mr. Maing Mye), against the resolution.

The result of this voting demonstrated the fact that the Council as then constituted, did not give satisfaction so far as Indian needs were concerned, but the almost unanimous voice of the elected Indian members of the Council, both Hindus and Mohammedans, must have impressed the Government of India and the Secretary of State that they could not in future ignore the representatives of the Indian people when such a Committee was appointed to inquire into matters relating to the Indian Railways.

The action taken by the Indian members was perfectly right. In conducting railway enquiries Indian opinion had been totally ignored. We find not a single Indian was invited to give evidence before the Select Committee of 1884, nor before the Mackay Committee of 1907-08. We are not sure of any Indian opinion having been taken by the Special Commissioner in 1901-1903 on the proposal for the abolition of the Government Consulting Engineers' Department or on the proposed lease of all State Railways to Companies. We trust Indian opinion will not be ignored in this manner again. India is not so indifferent about Railway matters, as it was before, when the authorities arbitrarily did as they liked. These instances show how the companies have been obtaining concessions and undue advantages from the Secretary of State by secret negotiations.

SECTION 6.—New Companies formed.

The Companies formed since 1879 are of the following classes :—

- (a) Construction and Working Agencies including old Guaranteed Companies with revised contracts.
- (b) Subsidized Companies.
- (c) New Guaranteed Companies.
- (d) Rebate Terms Companies.
- (e) Unassisted Companies.

See diagram III in Appendix 15.

(a) Agency Companies.

Construction and Working or Agency Companies have already been described in Section 2, Chapter I, and the principal terms of their working are contained in Appendix II. Those

terms are supplemented by the remarks at pages 9—11 *supra* and the following :—

G. I. P. Company.—The Agra-Delhi Chord, the Baran-Kotah, the Itarsi-Hoshangabad, and the Cawnpore-Banda Sections are worked by the Company for the same proportion of the total working expenses of the whole system including these Sections as the gross earnings of the railway bear to the gross earnings of the whole undertaking. In the case of the A. D. C. Ry., it is specially provided that no proportion in excess of 20 per cent. of the gross receipts, paid to any railway administration to whom running powers may be granted over the A. D. C. Ry., is debited in the General Working Expenses Account of the Company's under-taking, such excess, if any, being directly debited to the Revenue Account of the A. D. Chord as a separate charge against its receipts. The Cawnpore-Banda Ry. has to pay an additional charge of 5 per cent. of its gross earnings for the use of Rolling stock supplied by the G. I. P. Railway.

In the case of the Baran-Kotah Ry., it is laid down that the charge for working expenses is not in any half-year to exceed 50 per cent. of the entire gross receipts of the Baran-Kotah Ry.

The new share capital of the G. I. P. Ry. Company was made up as follows :—

£1,750,000	issued in exchange for £67,047-17s. 9d. part of the annuity payable by Govt.
£825,000	issued in exchange for stock of the Indian Midland Ry. Company of the nominal value of £750,000 at £110 for every £100 of I. M. Ry. stock.
£2,575,000	Total.

M. & S. M. Ry. Company.—The Government is entitled to retain out of the Company's share of surplus profits for the year, the rupee equivalent of the guaranteed interest, If the Company's share for the year be less than the guaranteed interest, the

deficiency is not to be made good out of the Company's share of a subsequent year.

After payment of interest on debentures, the net earnings are divided between the Government and the Company in proportion to the respective shares of capital contributed by them. For the calculation of capital see page 338 *supra*.

The Dhone-Kurnool Ry. is worked by the Company for the same percentage of working expenses on gross earnings as is incurred on the Company's system, except for maintenance of way and works for which actual cost is debited to the Dhone-Kurnool Ry., and an extra charge of 5 per cent. of the gross earnings of the branch is made for the use of Company's rolling-stock.

Bengal Nagpur Company.—The Company was formed in 1887. It took over the Nagpur-Chattisgarh State Railway (which had been opened in 1880 on the metre-gauge and converted to Broad-gauge in November 1888), and constructed other lines in this system. In 1902 it took over also the Northern Section of the East Coast Railway, which had been completed by Government in 1897.

The first contract of the Company was to expire on 31st December 1913 or in any succeeding tenth year; but in November 1912 the Secretary of State modified that contract and gave a continuous lease of the lines to the Company for a long term up to 31st December 1950. In 1912 Sir T. R. Wynne, who was previously the Agent of the B. N. Ry., was the Chairman of the Government Railway Board in India. The share capital of the Company is three millions sterling out of a total cost of about 29 millions. Still the Company gets one-fourth of the surplus profits. On what basis this is allowed has not been explained in the Railway Board's Administration Report.

The S. I. Railway contract of 1890 was revised in 1909 and the lease was extended to 31st December 1945.

The B. B. & C. I. Company's contract, executed only in April 1907, was revised in October 1913, and the lease was

extended from 1930 to 31st December 1941. However, unlike the condition in the M. & S. M. Ry. Contract, the B. B. & C. I. Contract provides that the surplus of one half-year may be applied in making up any deficiency in the other half-year towards the 4 per cent. interest on Government Capital.

The Burma Railways Company was formed in 1896 to take over the Rangoon Irrawadi Valley and other State Railways then existing in Burma, and to extend them. All moneys required for the Burma Railway Extensions are supplied by the Government. The contract for the Southern Shan States Railway has not been published.

The Railway Contracts and agreements were fully published by the Government up to 1901. Their publication has been discontinued since. It is hoped a Member of the Indian Legislature will move for a complete Return of the Railway contracts between the Government and the Railway Companies.

In the case of the companies which work railways on behalf of the Government of India, the Government powers of control are specified in the contracts between the State and the Companies. The provisions contained in the contracts were summarised as follows by the committee of 1908:—

1. The Company is bound to keep the line in good repair, in good working condition, and fully supplied with rolling stock, plant and machinery; to keep the rolling-stock in good repair and in good working condition; and to maintain a sufficient staff for the purposes of the line; all to the satisfaction of the Secretary of State.
2. The Secretary of State may require the company to carry out any alteration or improvement in the line, or in the working, that he may think necessary for the safety of the public or for the effectual working of the line.
3. The train service is to be such as the Secretary of State may require, and the rates and fares are to be subject to his approval. (A certain amount of latitude is usually allowed to the com-

pany in fixing its rates, within maxima and minima laid down by the Government).

4. The company has to keep such accounts as the Secretary of State may require, and these are subject to audit by the Secretary of State.

5. In all other matters relating to the line the company is made subject to the supervision and control of the Secretary of State, who may appoint such persons as he may think proper for the purpose of inspecting the line, auditing the accounts, or otherwise exercising the power of supervision and control reserved to him. In particular the Secretary of State has the right to appoint a Government Director to the Board of the Company, with a power of veto in all proceedings of the Board.

6. All the moneys received by the company in respect of the undertaking, whether on capital or revenue account, have to be paid over to the Secretary of State.

7. All expenditure by the company has to be stated and submitted for the sanction of the Secretary of State.

8. The Secretary of State supplies the company with funds as required to meet sanctioned expenditure.

9. The raising by the company of a certain initial capital is provided for* and no further capital can be raised without the sanction of the Secretary of State, who has the option of deciding whether he shall himself provide any additional capital required, or shall allow the company to raise it upon shares or debentures on terms to be agreed upon.

10. On the capital raised by the company, interest is guaranteed by the Secretary of State, and has to be paid by him at stated dates.*

11. In addition to the guaranteed interest, the company receives a share of any surplus profits, which are calculated as follows: From the amount of the gross earnings of the railway the following sums are deducted:—

(i) the working expenses;

* See foot note at page 349.

- (ii) the guaranteed interest that has been paid by the Secretary of State,*
- (iii) interest on the capital provided by the Secretary of State; and the amount remaining (if any) represents the surplus profits of the railway. Of such surplus profits a certain proportion (as fixed by the terms of the contract) is paid to the company, the remainder being retained by the Government.

12. The contract is terminable, either absolutely or at the option of the Secretary of State, after a certain period (in most cases about 25 years), when the share capital of the company is to be repaid at par by Secretary of State,* who has to assume all outstanding liabilities of the company incurred with his sanction.

In the case of most of the lines *owned* by companies, provisions similar to those stated in clauses 1, 2, 3, 4, and 5 above, though in some instances less stringent, are contained in the contracts.

Although the contracts are in the name of the Secretary of State, the greater part of the work of supervising the lines and the accounts is conducted by the Government of India. Before the institution of the Railway Board in 1905, this work was performed by the Public Works Secretariat of the Government of India, acting under the direct control of a Member of Council who took charge of Public Works business. On the formation of the Railway Board, the functions of the Public Works Secretariat, so far as the Railway Branch was concerned, were

* This does not apply to the Bengal & North-Western Railway Company, which has raised no capital for the purposes of the Tirhoot State Railway. In the case of East Indian Railway Company, the capital of the Company is represented by the capital value (£6,550,000) of a portion (one-fifth) of the East Indian Railway annuity, payment of which is deferred, the holders receiving instead interest at 4 per cent. per annum on the capital value, with a share of the surplus profits of the railway. On the determination of the contract with the Company, the deferred annuity will become payable. On determination of the contracts of other agency Companies, their share capital is repayable at par, together with the liability for their debentures.

transferred to it under a Resolution of the Government of India, dated 18th February 1905.

The manner in which the provision of funds is made for lines owned or guaranteed by the Government is as follows:—Some time before the beginning of each financial year, a statement is drawn up by the Government of India containing an estimate of the amount that can be made available for capital expenditure on railways during the year, and proposals as to the manner in which it shall be expended, whether for the improvement of existing systems, for progress on lines under construction, or for the commencement of new lines. The estimate of resources includes all sums expected to be provided by the State from whatever source, and all money expected to be raised by guaranteed companies; the scheme of expenditure includes expenditure on lines owned by the Government or by guaranteed companies. This scheme of expenditure, when sanctioned by the Secretary of State with such modifications as he thinks necessary, becomes the railway programme of the year. Since the institution of the Railway Board, it has been customary for the Government of India to submit annually, not only a scheme for the coming year, but also schemes for the two following years; but the sanction given by the Secretary of State to the latter is purely provisional.*

(B) New Subsidized Railways.

These railways have been provided by Companies with Capital raised upon shares and debentures, the Government or the District Boards allowing certain Subsidies, in order to enable the Companies to pay a reasonable dividend to their share-holders, especially during the early periods of the railways. The subsidies given are various in form in the different cases or conditions. The typical ones are—

- (i) Grant of land only free of cost, or free use of District roads with exemption from the Road Cess.

* Paras. 6 and 7 of Report of the Committee on Indian Railway Finance and Administration 1908.

- (ii) Or in addition to above, cash subsidies for a number of years at the start, to make up a certain dividend; the Government or the District Board giving the subsidy receiving half a share of the surplus profits when these accrue in excess of the fixed dividend, with power to acquire the railway after a term of 15 to 41 years, by paying a sum equal to 20 or 25 times the average net annual profit made by the railway during the three, four or five years, immediately preceding the purchase, subject to a maximum of 120 and a minimum of 100 per cent. of the capital outlay. In some cases the premium is allowed at 40 per cent., or the price is the fair market value, or the value as a dividend-earning investment.

The following Companies were formed under these concessions in the years noted against each:—

1. Darjeeling Himalayan ...	1879	a. 16. Ranaghat-Krishnagar ...	1895
2. Dibru-sadiya ...	1880	a. 17. Begowly Baxaul ...	1896
a. 3. Bengal Central ...	1881	a. 18. Brahmaputra-Sultanpur ...	1895
4. Rohilkhand and Kumaon ...	1882	19. Baraset-Basirhat ...	1897
5. B. & N. W. ...	1882	20. Bengal Doars Extensions ...	1898
a. 6. Deoghur ...	1883	a. 21. Kalka-Simla ...	1898
a. 7. Tarkessur ...	1883	22. Bakhtiarpur-Bihar ...	1899
b. 8. Thaton-Duinzaik ...	1884	23. Powayan ...	1901
a. 9. Nilgiri ...	1886	24. Shahdara-Saharanpur ...	1905
10. D. U. K. ...	1889	25. Dehri-Bohtas ...	1907
11. Bengal-Doars ...	1891	26. Matheran ...	1909
12. Howrah-Sheakhah ...	1895	27. Ars Sasaram ...	1906
13. Howrah-Amta ...	1895	28. Jessore-Jhenida ...	1910
14. Tenzpur-Balipara ...	1896	29. Mirpur Khas Jhudo ...	1911
15. Barai ...	1895	30. Mirpur Khas Khudro ...	1913

Eight of the above railways marked (a) have been acquired by Government. The Thaton-Duinzaik line was closed for traffic in November 1907. The remaining twenty-one Companies are still in operation.

The Companies of the first kind began their operations upon their own responsibility, most of them receiving the whole of the profits, the Government having allowed the companies land free of cost and reserving to themselves the right of purchasing the railways after a term of years. The main conditions of the contracts of these Companies are given in appendices VI, VI (a).

VII and X. Particulars of some of the Companies are given in the following paragraphs:—

Darjeeling Himalayan Railway Company was formed in 1879, with the right to use the existing Cart-road free of cost, and a subsidy from the Local Government to make up the gross receipts to two lakhs of rupees annually. After five years, half the net profits of any year in excess of 5 per cent., were to be applied in repayment to the Government of the cost of maintaining the cart-road during the same year or in making good the deficiency in gross receipts of the Company supplied by the Government. The Government had the power to terminate the contract in 1909 or in 1919, by payment of the value of the railway as a dividend-earning investment, with an additional bonus of 20 per cent. over such value.

The Dibru-Sadiya Railway Company was formed in May 1880 on terms similar to those of the preceding Company. The Government had the power to acquire it in February 1921.

Bengal Central Railway Company. Under its Contract dated 26th July 1881, this Company was allowed by the Secretary of State for India free land for a period of 99 years and a guarantee of interest on its Capital not exceeding £1,250,000 at 4 per cent. per annum, until 30th June 1886 or the date of opening for traffic throughout, such interest being subsequently repayable by the Company, together with simple interest at 4 per cent. per annum, out of the net earnings of the railway, whenever they amounted to over 5 per cent. in any half-year.

The rate of exchange in transactions in English and Indian currencies between the Secretary of State and the Company was to be the average rate of bills drawn by the former on the Government of India in each half-year.

At the end of the term of 99 years, the land together with the lines and buildings, works and fixed machinery thereon, were to revert to the Secretary of State, free from all debts and charges, while the Secretary of State was to purchase the Company's engines, carriages, etc., at fair value (Clause 13 of the contract).

It was lawful for the Secretary of State to purchase the Company's line, etc., on the 1st of January 1912 or on the 1st of May 1932 upon giving one year's notice (clause 42), and payment of full capital cost plus a bonus of 25 per cent.

By July 1885 the company raised a capital of £750,000 and expended the greater part of it in constructing the lines, which were opened for traffic before that date. A sum of £77,481 12s. 3d. was paid by the Secretary of State to the company upto 30th June 1885 in the shape of interest on capital, and it was repayable by the Company. But the income from the line was so poor that during the year 1885-86, it did not cover even the working expenses (excluding the interest on Capital outlay) and showed a deficit of Rs. 6,000, *i.e.*, the gross income fell short of the working expenses by Rs. 6,000. The Directors of the company prevailed upon the Secretary of State and got the terms of the contract materially changed, so that the railway instead of a private enterprise, was then classed as a State railway built through the agency of the Company, with a guarantee of $3\frac{1}{2}$ per cent. per annum *out of the general revenues of India*, together with one-fourth share of *net earnings* (not surplus profits) of the railway. The revised terms were embodied in a new contract which was executed on 5th January 1887 and brought *retrospectively* into effect from 1st July 1885. The claim for the repayment of the interest, amounting to £77,481-12s. 3d. advanced by the Secretary of State, was waived (clause 50 of the second contract) and the responsibility for all burdens on account of the railway was transferred from the company to the tax-payers of India. The whole of the surplus profits was allotted to the company after the further advances of interest made by the Secretary of State subsequent to the 1st July 1885, were repaid (clause 49 (6) of the second Contract). Under clause 88 of this contract power was, however, reserved to the Secretary of State to terminate the contract on 30th June 1905 or on the 30th June of any succeeding tenth year, and the railway was accordingly acquired by the State in 1905 for £500,000, the amount of the share capital raised by

the Company. It was paid by the Secretary of State by 3 per cent. stock (page 295 of the Report of the Committee on Indian Railway Finance and Administration 1908).

Rohilkhand and Kumaon Railway Company.—This company was enlisted with a guarantee of interest at 4 per cent. per annum for about three years and thereafter a subsidy of Rs. 20,000 half-yearly for ten years. Its contract was executed on 12th October 1882. From 1890 this company has the concession of working 312·51 miles of the Lucknow—Bareilly State Railway, and the Powayan Light Railway. From the former it made the following profits:—

1912	...	Rs. 1,21,033	1916-17	...	Rs. 62,913
1913-14	...	„ 74,936	1917-18	...	„ 92,935
1914-15	...	„ 19,655	1918-19	...	„ 1,26,608
1915-16	...	„ 34,141	1919-20	...	„ 77,341

The Company works the two Railways as parts of its system, dividing the joint expenses of the whole system between the three lines in proportion to their respective gross earnings.

The surplus profits of the State Railway are divided between the Government and the Company in proportion to the capital contributed by each, but in the State Capital the amount advanced by Government to pay off debentures for £72,000 in 1911 and 1915, is not taken. This does not look fair.

B. & N. W. Railway.—This Company was enlisted as a subsidized Company on 12th December 1882, with free grant of land, procured at the cost of the Government of India. In return for this concession, the company was to allow the Government half share of the surplus profits over 6 per cent., per annum on its capital. The company began its operations upon its own responsibility.

In 1886 the Government contrary to the policy unanimously adopted in 1869 (see page 262), waived their right to the surplus profits of the B. & N. W. Railway, and from 1890 have allowed the company the lease of the Tirhut State Railway, 825·62 miles for working purposes, from which the Company

makes large profits. The Company's share of the surplus profits from the Tirhut State Railway for the last eight years is given below:—

Calendar Year.	... 1912	... Rs. 3,09,961
1st quarter of	... 1913	... „ 1,37,495
Official Year	... 1913-14	... „ 2,96,483
Official Year	... 1914-15	... „ 2,53,006
Official Year	... 1915-16	... „ 2,34,486
Official Year	... 1916-17	... „ 2,69,183
Official Year	... 1917-18	... „ 2,19,361
Official Year	... 1918-19	... „ 3,13,336
Official Year	... 1919-20	... „ 2,56,514

The terms of the contract for the working of the Tirhut State Railway are—

(a) The working expenses of the open system, exclusive of the charges for maintenance of way, works and stations, other than those for general supervision, are divided between the Company's railway and the Tirhut Railway undertaking, in proportion to their respective gross earnings.

(b) The charges for maintenance of way, works and stations, other than for general supervision, are appropriated and allotted to the Company's railway or the Tirhut Railway on the basis of actual expenditure incurred by each.

The accounts for (b) require careful scrutiny and supervision. It will be interesting to know what tests are applied to ensure that the actual costs are correctly booked. These terms require careful investigation to form an idea of the financial effects to the Government.

The first term of the original contract of the Company expired in 1912. The contract is therefore to run up to 31st December 1932. The Government are required to give to the Company not less than 12 months' previous notice to determine the contract on that date; otherwise it must run up to the end of 1981.

The purchase price in 1932 shall be 25 times the average yearly net earnings of the railway during the 5 years immediate-

ly preceding the 31st December 1932. 'In calculating the net earnings, the Government share of surplus profits under the original contract shall be deducted from those earnings.

The contract for the working of the Tirhut State Railway was terminable on 31st December 1919. The Railway Board's Administration Reports are totally silent as to what arrangements have been made with the Company for the working of the railway from that date. If the contract has been extended to 31st December 1932, the notice due to the Company will have to be given in 1930 or 1931; but if the Company fail to observe its obligations as to satisfactory working of the railway, its contract can be determined at any time, at six months' notice, on paying the value of rolling stock, stores, etc., and fair value of the line.

The B. & N. W. Ry. Company also exercises running powers and hauls its trains and traffic over the Metre-gauge link of the O. & R. Railway between Cawnpore and Burhwal and between Benares Cantonment and City; paying 75 per cent., of the gross receipts arising from the traffic, to the O. & R. Railway.

The *Deoghur Railway Company* built a metre gauge line of 4.75 miles at a cost of Rs. 3,01,256. It was allowed land free but no guarantee. It was acquired by Government and converted to Broad-gauge in September 1913. The line forms part of the E. I. Railway. It was purchased on the average market rate of its shares during the three preceding years, with a bonus of 20 per cent. thereon.

Tarkessur Railway Company.—This Company built a Broad-gauge railway of 22.23 miles at a cost of Rs. 18,06,280 up to 1912. It was allowed free grant of land, no guarantee, but working of its line by the E. I. Ry., for the same percentage of the gross earnings as obtained on the E. I. Ry. system as a whole, with 5 per cent. of the gross earnings for the hire of rolling-stock; and contribution to the Provident Fund. The balance of the gross earnings was divided, $\frac{3}{4}$ ths to the Tarkessur Company, and $\frac{1}{4}$ th to the E. I. Company. The contract was allowed to run the

full term of 30 years up to 1914, when the line was purchased for Rs. 32,02,972, the aggregate net profits of the line during the preceding 20 years (account No. 75 B. of Finance and Revenue Accounts of India for 1917-18).

The Thaton-Duinzaik Railway was undertaken by Mr. G. E. L. Dawson in 1884. In December 1900 the Irrawadi Flotilla Company bought the railway and worked it till 15th November 1907, when the line was closed (page 229 of Administration Report for 1907).

Nilgiri Railway.—The original Nilgiri Railway Company was registered on 30th September 1885 with a nominal capital of Rs. 25 lakhs and a contract was executed between the Secretary of State and the Company on 26th February 1886. That company went into liquidation in April 1894, and a new Company was formed in February 1896 to purchase the line from the former company and supply the capital required to complete it and to construct the proposed extension to Ootacamund. The line from Metupolyan to Conoor was completed by the new Company and opened for traffic on 15th June 1899. On the offer of the new company to sell the line, it was purchased by the Government for £235,000 on 1st July 1903. The extension to Ootacamund was constructed by Government. Up to 31st December 1907, the line was worked by the late Madras Railway Company. From that date the South Indian Railway Company are working it, on condition that the interest on the capital cost of the Coonoor-Ootacamund railway is borne entirely by the Government, while the company take the railway earnings for working expenses alone.

Delhi-Umballa-Kalka Railway.—This was originally formed in 1889, as a subsidized company, with free-grant of land only and power to pay 4 per cent. interest to share-holders out of capital during construction period. It has had two concessions from the Government since then, viz:—

(i) Concession of 2 per cent. of gross earnings in the working charges, allowed from 1st January 1893 under a contract deed of 1895.

(ii) A guarantee of $3\frac{1}{4}$ per cent. on its share capital from 1896 under a contract deed dated 9th June 1897.

According to the last agreement, the Government were entitled to half a share of the surplus profits over the guaranteed interest, until the subsidy was repaid.

The line can be purchased by Government on the 31st December 1926, when Government will have to pay the company a sum equal to 25 times the average yearly profits of the company during the preceding 5 years. The line has been earning over 9 per cent. per annum since the year 1911; at this rate, the Government will have to pay a premium of over 100 per cent., while the maximum premium allowed in other contracts concluded since 1884 is 20 per cent. only. Why that wholesome limit was not adopted in this Company's case is not known. This should certainly have been done when the contract was revised in 1895 and 1897. Will this company make a reasonable reduction in its purchase price, in consideration of the leniency shown by the Secretary of State both in this contract and in the contract for the Kalka-Simla Railway, *vide* page 360 *infra*?

Bengal Doars Railway.—This Company was originally subsidized in 1891 by the District Board of Jalpaiguri, which paid for four years an annual subsidy of Rs. 4,000 to make up the net profits to 5 per cent. on the capital expended. From 1900 the line has been paying over 7 per cent. per annum. In 1916-17 its dividend was 14·70 per cent.

From 1898 the Company has made several extensions, without any assistance, beyond free grant of land. The Government have the right to purchase the lines on 31st December 1919 or at the end of any succeeding seventh year, by paying—

- (a) For the original line, $1\frac{1}{3}$ ths of the amount of the invested capital liabilities;
- (b) For the extensions, 25 years' purchase of the average yearly net earnings for the whole period, subject to a maximum of 120 and minimum of 100 per cent. of the capital expenditure and liabilities in sterling.

Howrah-Amta and Howrah-Sheakhla Light Railways.—These Railways have been provided by the Bengal District Road Tramways Company, the District Boards and the Municipality allowing one side of portions of their roads for the purpose of laying the line, free of charge for 20-21 years. The District Boards guaranteeing also to make up the net profits to 4 per cent. per annum on the Capital outlay. The Municipality will levy a track-rent of Rs. 2,000 per mile per annum after the first 20 years.

The Barsi Light Railway.—This Company was formed in 1895. It has a total length of 117.50 miles on the 2'-6" gauge, of which 36 miles are in the territory of H. E. H. the Nizam, which may be acquired on 1st May 1931. The contract for the line in the British territory was extended to 1st January 1944, under the second contract dated August 1902. The purchase price for the British section is par value, and 5 per cent. in excess of actual capital expenditure in the State territory.

Ranaghat-Krishnagar Light-Railway Company.—This Company was formed in December 1895, under the sanction of the Bengal Government, to construct a 2'-6" gauge line, 20.25 miles long, with a subsidy by the District Board to make up the net earnings of the Company to Rs. 1,473 per mile open per annum limited to a maximum claim of Rs 28,000 per annum. The District Board had the right to determine the contract by purchase under Section 41 Act III of 1883 (Bengal Code), the amount payable being calculated at 20 years' purchase of the annual net profits to the Company, during the 4 years preceding, together with a bonus of 20 per cent. on the amount so arrived at.

When the net earnings, after deducting any Commission payable to the agents, exceeded 4 per cent upon the Capital, such surplus exceeding 4 p. c., and not exceeding 8 p. c., was to be divided equally between the Company and the District Board; when the surplus exceeded 8 per cent the Company was to receive $\frac{1}{4}$ share, $\frac{3}{4}$ being equally divided between the District Board and the Government. The line was taken over by Government on 1st July 1904 and is worked in the E. B. Railway system.

Ségowlie-Razaul Railway Company.—This Company was formed in 1896 to construct a line of 18·72 miles. The line was opened in March 1899, but the Company failed to raise the capital required to bring the line up to the proper standard, and surrendered the railway to Government. The Secretary of State acquired it in 1904 for £56,333 (page 295 of Evidence before the Mackay Committee of 1908). The line is now worked by the B. & N. W. Ry. Company as a part of the Tirhut State Railway.

Brahmaputra Sultanpur Railway Company.—The Company was formed in December 1896, with a free grant of land and a guarantee of 3 per cent. on the capital by the Government. The line was to be worked by the E. B. Ry. for 45 per cent. of the gross earnings for working expenses, which may include any single item of capital expenditure not exceeding Rs. 1,000 classed as Minor work, subject to a maximum charge on such account of Rs. 20 per mile in each half-year. The surplus profit over 3 per cent. on the capital was to be equally divided between the Government and the Company. The contract was to run till 31st December 1919, but the line was purchased by Government in 1903-04 (pages 239-40 of Evidence, Mackay Committee), and is worked as a part of the Eastern Bengal Railway System. The Contract terms for purchase were 25 times, the average yearly net earnings during the 5 years prior to purchase, not exceeding by more than 20 per cent., or not being less than, the total capital expenditure.

Kalka-Simla Railway.—The construction of this line was originally started by the Delhi-Umbala-Kalka Railway Company, in 1898,* but finding it unprofitable, the Company surrendered it to Government on 1st January 1906, instead of 31st December 1928 when it was purchaseable under the contract. The price paid by the Government was £300,000, the Secretary of State waiving all claim to arrears of unreturned interest on the advances, viz:—Rs. 1,16,47,512, made to the Company (page 133

* Under an Agreement recorded in Appendix to Part II of the Railway Administration Report for 1898-99.

of the Administration Report for 1915-16.) The capital cost of the line up to 31st December 1905 was shown at Rs. 1,76,11,644 in the Report for 1907, the line having earned a dividend of 2.28 per cent. on the capital outlay in 1905.

Matheran Steam Tramway Company.—This Company's line is worked by the G. I. P. Railway Company for actual expenditure, including cost of stores concerned in Traffic and Audit Departments on the Matheran line, *plus* 5 per cent. per annum as rent on new structures, machinery, plant and furniture and 7½ per cent. per annum for ballast, permanent-way, etc., including maintenance and renewal, for sole use of the Light Railway, with a certain proportion of the annual rental for new joint-works, etc.

The agreement is terminable on 31st March or 30th September in any year, on six months' notice by either party.

(c)—New Guaranteed Railways.

There were ten of such lines shown in the Railway Board's Administration Report. Four of them were not opened for traffic on 31st March 1918. The first one is the Hardwar-Dehra Railway Company formed in 1897, with a guarantee of interest at 3 per cent per annum on its capital. The line is 32 miles long with a capital cost of Rs. 30,40,000. In return for the guarantee the Government are entitled to half a share of the surplus profits in excess of the guaranteed interest and they have the right to determine the contract on 31st December 1919, or on 31st December in the last year of any subsequent period of ten years, by paying to the Company 25 times the average yearly net earnings for the preceding three years, subject to a maximum of 120 and a minimum of 100 per cent. of the total capital expenditure. The line earned a dividend of 8.41 % per annum on its capital cost during the year 1915-16 and of 9.15 per cent. in 1916-17.

The second line, Burdwan-Katwa, was opened only on 1st December 1915, and comes under para. 2(i) of the Rebate Terms of 1913, given at page 366. The other four lines are of more recent dates; the terms of their contracts have not been published.

(d)—Rebate Terms Companies.

In 1893 the Government of India offered Rebate Terms for the encouragement of construction of feeder (Branch) lines. These terms allowed of the grant of free land, of the branch being supplied with rolling-stock by the main line, and worked by it for not more than 50 per cent. of the gross earnings of the Branch, and of a payment by the main line of a rebate up to 10 per cent. of the gross earnings derived by the main line from traffic inter-changed with the branch, so as to make up dividend of 4 per cent. per annum. In 1896 these rules were modified, raising the rebate to the full extent of the net earnings derived from the traffic inter-changed with the branch, so as to make up a dividend of $3\frac{1}{2}$ per cent.

Mr. Thomas Robertson, C.V.O., Special Commissioner for Indian Railways, went into the matter of railway extension and recommended the following terms, based upon the proposals of 1867 by Sir (then Captain) E.C.S. Williams, R.E.:—

1. Free Land.
2. Carriage of construction material over *all* Indian railways at revenue rates, not public rates.
3. *During construction* and to the close of the year during which the line is completed, a gold guarantee of 4 per cent. to be paid out of capital.

4. *After opening.*—

- (i) Line to be worked by an existing line for the same proportion of gross earnings as the working expenses of the main line bear to its gross earnings, subject to a maximum charge of 50 per cent. of the new line's gross earnings.

Reasonable Home Board expenses to be a charge against working expenses until the line pays 5 per cent. clear from its own earnings, as also *at all times* charges for Government Supervision and for new Minor Works.

- (ii) Where the line is on the same gauge as the main line, rolling stock to be supplied by the main line; where the gauge differs, the new line to provide its own stock;

the charge for working expenses in either case remaining as in (i).

N. B.—This will mean that the narrower gauge will pay 5 per cent. extra for working expenses which will be sufficient to cover extra expense to the main line on account of the difference in gauge.

It is desirable that the main line should provide rolling-stock when the new line is on the same gauge, so as to prevent disputes as to the actual requirements of the new line.

(iii) A minimum dividend of 3 per cent. in gold to be guaranteed, the Government making up the deficiency if by any chance the net earnings of the new line and the Rebate from interchanged traffic together do not produce the sum guaranteed.

(iv) The line's net earnings to be supplemented by a Rebate of the whole of the main line's net earnings from interchanged traffic, or such smaller amount as will allow of 4 per cent. in gold on the new line's capital outlay.

The net earnings from interchanged traffic to bear the same proportion to the gross earnings from such traffic as the net earnings of the system bear to its gross earnings.

In any year that the new line earns enough to receive a return of 4 per cent. from its own traffic, no Rebate to be paid by the main line.

(v) The new line to retain all its earnings up to 5 per cent., dividing all excess over that amount equally with Government.

(vi) The period for first purchase might be extended from 21 to 33 years, and the limit of premium of 20 per cent. be removed, the minimum limit of purchase price continuing as before,

(vii) Promotion money should be settled in each case; it need not be a high price;

(viii) New Minor Works up to a certain limit per mile per annum, no matter what the nature or the value of the

work might be, to be charged to Revenue, the remainder being a charge to capital. The limit of charge to Revenue should not be fixed too high.

The Committee of 1907-08 on Indian Railway Finance and Administration recommended that 'as far as possible the trunk lines should own as well as construct and work their branches. Their objections to the branch railway companies were:—

1. That the method of obtaining capital for railways through branch companies 'is not only expensive but often results in trouble.'

2. "As a rule a promoter requires rebate terms which will ensure a higher rate of interest than that at which money can be borrowed either by the Secretary of State or by the trunk line company."

3. "A considerable amount of money is spent on promotion and preliminary expenses, and a Board of Directors, a Secretary, and an office staff and premises have to be paid for out of the revenues of the line, although the chief duties to be performed by the branch line company consist in receiving the earnings of the line from the Government and distributing them to the share-holders."

4. "In a number of cases it has happened that branch lines have not fulfilled the expectations of their promoters and the Government has been compelled either to grant improved terms or to take over the lines" (para. 28 of Committee's Report).

The Committee referred to the remarks that were frequently made as to the failure of the Government of India to encourage what is called "private enterprise" in railway construction, and found that the complaints under this head were generally based on cases in which the Government of India had refused to grant to projected companies *all* the financial assistance for which the promoters had asked; in some instances the ground of complaint had been that the Government had insisted on restricting the extent to which the subscribed capital might be used to defray the expenses of promotion. (para. 8 of the Committee's Report)

One of the items of these expenses is the commission taken by the agents floating the companies, which in some cases was as high as 6 per cent. on the capital raised. The writer noticed this high percentage as a remuneration for the nominal work done by the agents of a Branch Railways Company, of which he is a shareholder, and questioned the propriety of this charge some years ago, when he was simply told by the Chairman of the company, a member of the firm carrying on the agency work of the Railway Company, that the percentage was authorized by the Indian Railway Board. It applies not only to the yearly or half-yearly profits earned by the Branch Railways but also to the large sums of capital collected from the shareholders. It takes a large slice off the capital and adds largely to the first cost of construction. We have always thought that this is a high charge and should be considerably reduced. A charge of two per cent. on the capital raised or profits made should be ample. The remarks of the Committee as to the unreasonableness of the complaints are perfectly justified. It may however be noted that the complainants were only European firms who have undertaken agency work for the Branch Railway Companies started in India. It is time now that Indian mercantile firms should take up this agency work with profit to themselves and reasonable terms with shareholders and the Government of India.

Retired Indian Officers of Railways and the Public Works Department of the Government of India may follow the example of those Englishmen who retire from Indian Services and take up Directorships of the Indian Railway Companies in England.

The Committee pertinently remarked that "it is open to question whether the promotion of schemes, to which Government aid is considered essential, is entitled to be called "private enterprise."

In their No. 457 R. P., dated 14th-November 1913, the railway Board revised the Rebate Terms as noted below :—

1. Free grant of land for railway purposes in British territory.

2. Financial Assistance in the shape of—

- (i) a guarantee of interest at $3\frac{1}{2}$ per cent. per annum on paid-up capital, subject to the condition that all surplus profits which may be earned over 5 per cent. on the said capital shall be equally divided between the Government and the Company, or
- (ii) by way of rebate, such sum, not exceeding in any year the net earnings of the main line from the traffic interchanged between the Branch and the Main line, as shall together with the net earnings of the Branch line itself, make up an amount equal to interest at 5 per cent. per annum on the capital, any surplus over 5 per cent. without the rebate, to be divided equally between the Government and the Company.
- (iii) capital may be raised for the same branch line partly under the guarantee system and partly under the rebate system.

3. The company has the option of working the Branch Railway under its own management, the Government having their own Director on the Board.

4. The main line will work the Branch for a percentage of the gross earnings of the Branch. When both the lines are of the same gauge, this percentage will be the same as on the whole system of the working railway but will not in any case exceed 50 per cent. of the gross earnings of the Branch.

5. Interest at a rate to be agreed upon, on the paid-up capital shall be allowed to be charged to capital upto the close of the half-year in which the Railway shall have been opened throughout for public traffic.

6. The Administrative expenses of the Company may be charged to capital during construction and to working expenses or surplus profits when the line is open.

7. Government may purchase the Branch line at any time, upon one year's notice, if the Company be unwilling to alter the gauge or extend the line when required by Government, other-

wise at the expiry of 30 years from the date of opening or at subsequent intervals of 10 years, at a price 25 times the average net annual earnings of the three preceding years, subject to a maximum of 120 and minimum of 100 per cent. of the capital expenditure.

81 The charges proposed for floating the Company have to be settled with Government when submitting the application for the concession.

Under the Rebate System twenty-eight companies were formed, of which 5 were under construction on 31st March 1913, and Noakhali Railway was acquired by Government in 1905. The 22 open lines had a total length of 1828 miles, with a capital of Rs. 14,22,01,000.

Eighteen of the Branch lines were worked by the main lines, with which the branches were connected; while four of the branches were worked by the owning companies. In the case of the Nadiad-Kapadvanj Branch, worked by the Gujrat Railways Company, the rebate was allowed by the State main line leased to the B. B. & C. I. Railway Company, while in the case of the Darjeeling Himalayan Extension, the rebate was made out of the net earnings of the Eastern Bengal State Railway. The peculiar point in these two cases was that the rebate was allowed by the main lines even though they did not work the Branches; while in the other cases the main lines which allowed the rebate, also worked the Branches as parts of their own system.

Noakhali (Bengal) Railway Company.—This Company was formed in 1901, with land free and a rebate not exceeding one-half of the gross earnings of the Assam-Bengal Railway from interchanged traffic, to make up the earnings to a total of Rs. 30,000 each half-year, 3 per cent. on the fixed capital of £130,000. The Assam Bengal Railway Company worked the line for Rs. 25 per mile open per week, besides Contribution to Provident Fund and Government Supervision. The net earnings with the rebate gave a return of 1.23 per cent., on the capital outlay of Rs. 21,04,827 in 1903. The Company asked the Secretary of State

to relieve them of the railway, which was acquired by the Government in 1905 for £115,000. (page 295 of Evidence recorded by Mackay Committee 1908). It is included in the Assam-Bengal Railway. Its contract was to run up to 1922. The contract provided for the purchase price at 25 times the average yearly net earnings during three years immediately preceding the purchase, subject to maximum of 120 and minimum of 100 per cent. of capital outlay.

The South Behar Railway has been leased by the Owing Company to the Government for a half-yearly sum of £15,000, and the line is worked by the E. I. Ry. on behalf of the Government.

The Mymensingh-Jamalpur-Jagannathganj Railway was acquired by Government in 1919.

Only one company on the guarantee and rebate system combined was formed upto 31st March 1916. It is the Mymensingh Bhairab Bazar Railway, constructed by the Assam-Bengal Railway Company, under a sanction accorded on the 5th May 1915.

On the whole these rebate terms are reasonable both to the Companies and the Government. In view, however, of the market rate of interest during the recent years, it is desirable that the rates of 5 per cent. in clauses 2 (i) and (ii), page 366, may be raised to 8 per cent. per annum.

(e) *Unassisted Companies*.—There were only five small companies of this description, with an open length of 76·08 miles and capital cost of about Rs.33,50,000. The first of these companies was formed in 1881, while the remaining four came in between the years 1890 and 1914. These companies have no guarantee from Government and have generally paid for the land taken for railway purposes. They are based upon true principles of private enterprise in the provision of railways. The Government retain control over their rates and fares and in some cases the privilege of having mails carried at the State railway rates. The railways can be acquired by the Government after 21

to 50 years from the date of the opening or the date of sanction to the construction of the line. The price payable by the Government is the fair market value of the property; in one case it is stipulated at $\frac{1}{3}$ ths in excess of the original capital outlay; in two others at 25 times the average annual net earnings of the three preceding years, with a maximum of 120 and minimum of 100 per cent. of the capital outlay. Full particulars will be found in appendix VIII. Unassisted Companies taking the whole risk upon themselves should be absolute masters of the property, and should receive the market value in case the Government acquire the railway.

All attempts to enlist unaided *private enterprise* in the construction of railways in India failed. In 1863-64 two small companies were formed to construct railways with Government subsidies, but they failed to raise all the capital required for their undertakings without a guarantee from Government. In his minute dated 9th January 1869, Lord Lowrence recorded the following para on private enterprise:

"11. It is often objected to the prosecution of public works by the Government, that it is not proper for the Government to interfere with private enterprise (which is said to be the proper agency by which works like railways should be carried out), and that Government should not take advantage of its position to prevent the investment of capital by private persons in large public works. *Now the Government of India has for several years, been striving to induce Capitalists to undertake the construction of railways in India at their own risk, and on their responsibility with a minimum of Government interference. But the attempts have entirely failed, and it has become obvious that no capital can be obtained for such undertakings otherwise than under a guarantee of interest, fully equal to that which the Government would have to pay if it borrowed directly on its own account. It is an abuse of language to describe, as an interference with private enterprise, what is only a refusal to support private speculators and to guarantee them from all possible loss by the credit of the*

State, or to allege that the investment of capital by private persons is hindered by the Government executing works, when private persons refuse to do so at their own risk. To speak of the Government as though it were a speculating corporation, desiring to benefit itself at the expense of the community, or any section of it, is an absurdity. The Government is bound to protect the interests of the public, and it has to consider what is the proper course to follow in carrying out railways, having regard to the true interests of the people of India. The question now before us is, whether it is reasonable or consistent with the true interest of India, to continue a system under which the revenues have to bear the whole risk and loss, and can derive no direct benefit from railway construction, in preference to one under which, with a risk certainly no greater and probably much reduced, the whole of the direct profits can be added to the public revenues, and made available for reducing taxation or preventing the imposition of new burdens." (The italics are ours).

The European Chambers of Commerce at Bombay, Madras and Calcutta and their Contemporaries in Liverpool, Manchester and Glasgow, have always looked upon India as a field for the supply of their raw material and as a market for their manufactured goods. They have been pressing for a rapid extension of railway in India but have taken no risk upon themselves.

In 1884 General Richard Strachey R.E., in his answer to question No. 22 before the Select Committee, warned "that if the Government again begins to give a guarantee of interest on railway capital, then you will never get a sixpence of unguaranteed capital." Eager to push on the extension of railways in India, Government have however been giving assistance to private companies, which virtually amounts to a guarantee or partial guarantee of interest on their Capital, whether it be a subsidy or a rebate from the main line earnings from traffic interchanged with the Branch lines. Unaided private enterprise in railways has not come forward simply for the initial mistake mentioned above. Like commercial business of Common Carriers, there

should have been independent companies to construct and work railways on their own risk as has been done in England, America and elsewhere. But the British Companies employed in India have been fattened at the expense of the poor tax-payer of India, without the latter getting due advantage, which generally follows the provision of a railway. This unfortunate result is due to the railways having been introduced into India prematurely (too early and too rapidly), without the people being taught the utilities of railways, *i.e.* without educating the people and training them for industrial and commercial enterprises, which was the duty of the Government to have done in the interests of the people who have been made to pay the high cost of the railway communication.

SECTION 7.—Indian Railway Finance.

The Committee presided over by Sir J. L. Mackay, made the following recommendations in 1908 :—

- (i) That the allotments for railway construction and equipment should be increased beyond those of recent years;
- (ii) That the programme of annual expenditure on railway construction and development in India be, for the present, fixed at £12,500,000 equal to £100,000,000 in the next eight years;
- (iii) That the 7½ millions of the above-mentioned sum of 12½ millions per annum, which will be obtained in England, be raised by the issue of ordinary India stock and by the issue of debenture stock and share capital by the agency companies;
- (iv) That with regard to the short-term debenture bonds issued by the agency companies, it is desirable to avoid adding to those now existing and to discharge them as opportunity arises;
- (v) That it would be advantageous were the Government to endeavour to realize a larger annual surplus than has been customary, that it may be possible to raise larger rupee loans than it has hitherto been usual to place on the Indian Market; and that in course of time, when the gold standard reserve has reached an amount beyond which it may be considered unnecessary to go, the whole of the profit derived from coinage might with advantage be utilized for expenditure on railways;

- (vi) That the scheme described in para. 24 of the Report under which the capital requirements of lines now dependent on Government capital, may be supplied without Government intervention or assistance, may receive consideration;
- (vii) That one or more of the State lines worked directly by the Government of India should be leased to companies formed under the above-mentioned scheme;
- (viii) That the Government should retain the right to resume at stated times, and on fixed terms, any lines the working of which may be placed in the hands of such companies, but the contracts with the companies should be for a long period, even upto 50 years;
- (ix) That the equipment and improvement of existing lines should take precedence of the construction of new lines;
- (x) That it was inadvisable to establish a central reserve of wagons for loan to any railway requiring additional stock;
- (xi) That the system and constitution of the Railway Board be amended on the lines indicated;
- (xii) That the attention of the Railway Board be drawn to the question of the possibility of improving the working of the existing rolling stock on Indian Railways;
- (xiii) That, when possible, advantage should be taken of periods of easy money to raise funds in excess of immediate requirements;
- (xiv) That as far as possible, trunk lines should own as well as construct and work, all branch lines;
- (xv) That the Railway Board should be instructed to give consideration to the question of ensuring closer correspondence between the estimated and the actual cost of railway construction than was shown, by several cases brought to the Committee's notice.

We have already dealt with clauses vi-viii, xi, xii and xiv at pages 337-40, 107-9, 75 and 391, and 364.

The Recommendations of the Committee were to largely strengthen the position of the Agency Companies and to extend the field of their operations by giving the Companies leases for the remaining Commercial lines of Government and by extending their leases to long terms up to 50 years, whereas the old Guaranteed Companies had only 25 years at a time, and Sir A. M.

Rendel recommended still shorter leases for 20 years. This Committee raised the limit of Capital outlay beyond what was allowed by the Secretary of State and the Select Committee of 1884, ignoring the promises of that Committee and of the Government of India to arrange to reduce the State debt after the railways contemplated in 1884 were made. The Committee of 1907 ignored also the wholesome check which was strictly laid down by the successive authorities that the capital expenditure on the railways should be limited to the amount which could be borrowed *in India*, without undue disturbance of the money market (see page 320 *supra*). In making their recommendation (vi), the Committee ignored the large burdens, as shown in our appendix No. 8, borne by the Government in the early days of the railways; the Committee allowed the Companies to share in the profits in proportion to the capital latterly found by the Companies and the original sum sunk by the Government *excluding* the burdens mentioned above. The Committee were, however, good enough to advise the Government not to accept the harmful advice of the Chairman of the Railway Board to sell outright a portion of the State property to the Companies.

The first recommendation of the Committee was that the allotment for railway construction and equipment should be increased beyond those of recent years. The annual expenditure in 1898-99 was £5,894,746, it rose to £6,705,064 in 1902-03 and continued to rise steadily, so that the allotment for 1907-08 reached a total of 10 millions sterling. The Committee went further and recommended to increase it to £12,500,000 per annum, or 100 millions sterling in eight years (para. 17 of the Report) or larger sums if money could be obtained.

Of the 12½ millions, 7½ millions* were to be annually raised in England and 5 millions in India. The methods by which the funds should be obtained in England were recommended as follows :—

* £9,000,000 was the maximum to be raised by the Secretary of State in London in normal years for all capital purposes.

1. Direct borrowing by Government on India Stock ;
3. Long-term Debenture Stock issued by the railway companies, upon the guarantee of Government, redeemable at the option of the companies ;
4. Issue by the companies of guaranteed share capital with a share of surplus profits (para. 20)

The amount of £5,000,000 to be annually made up in India was to be taken from the following sources (paras. 16 and 20) :—

	Lakhs.
Revenue Surplus	100
Annual appropriation from Revenue for reduction or avoidance of debt	75
Savings Bank Deposits	100
Rupee loan	325
Moiety of profits on coinage ...	150

Total ... 750=£5,000,000.(para. 16).

The Committee did not purposely take into account the sums which might be provided by the Indian States and by the District Boards, as such resources were uncertain and limited in amount. But the Committee thought it might be possible to obtain a larger amount by—

“ Endeavours to realize a larger average annual surplus than 100 lakhs ;

Larger rupee loans than 325 lakhs ;

Use on railway expenditure of the whole instead of the one-half of the profits made on coinage ;

and added—

“ When the money can be obtained, we do not think that a railway programme of even 20 millions sterling will be excessive.”

These recommendations were excessive and indirectly advocated extra taxation which generally leaves large annual surpluses.

Direct Government Borrowing.—(a) *India Stock.*—This, the Committee thought was unquestionably the cheapest method of raising money, and if sufficient could be obtained without materially lowering the price of the stock, there was little reason to look to other methods.

(b) *Special Railway Stock*.—A suggestions was made for the creation of—

- (1) A consolidated 4 per cent. railway stock secured on the revenues from the railways and having in addition the guarantee of the Government of India;
- (2) An Indian Railway Stock carrying a fixed rate of interest and taking in addition a share of the surplus profits of the railways as a whole.

Both these methods were rejected by the Committee as more expensive to the Government than India Stock and they remarked—

“The surplus revenues of the railways are merely part of the general revenues of India, which constitute the security for ordinary India Stock, and it is open to question whether the hypothecation of a portion of the revenues of India to the service of a new class of stock would be consistent with the Secretary of State's obligation to holders of India Stock. The second kind of the proposed railway stock would, create complicated conditions relating to the division of surplus profits, and the holders of it might advance inadmissible claims.”

The committee were satisfied that the following views expressed to them by Lord Rothschild on this subject were sound. His Lordship said—

“When the moment arrives for appealing for further funds, then will be the time to decide in what form borrowing is to take place.....The only advice I think I am entitled to give the Indian Government is to make no fixed and unchangeable law for future policy. It is always best to have more than one string to one's bow, and if, when the time comes, it is found impracticable or impolitic to act in a certain way, recourse can be had to any one of the methods sketched out on the memorandum which has been given to me.....I should be excessively sorry to tie the Secretary of State down to raising money in any one particular way.”

In reply to questions 1143 and 1144, he said that he would advocate raising money when the times were favourable even although the programme of works might not be such as to require the whole to be spent in any one year; and that he would not hesitate, if the moment were favourable, to bring out a larger loan than might be necessary for that particular year. Mr. Alex. Wallace, late Governor of the Bank of

England, expressed views similar to those of Lord Rothschild on this point, and the Committee assumed that these views would be carried into effect (para. 22.)

The amount to be spent annually on capital account of Indian Railways was fixed by the Committee after enquiring in the London and Indian money markets and in the Financial Department of the Government of India, as to what amount could be raised on Indian Government loans and what amount could be made available out of the general revenues of India. The Railway capital expenditure is mostly met from borrowed funds and the general principle laid down by the Committee was that "the effective limit of the amount to be spent in any year will be the amount that can be provided" with due regard to the requirements of the railways and their net receipts to meet the interest charges.

This was an unsound recommendation. It took no account of the capacity of the country or of the people to meet the charges on the heavy outlay advocated by the representatives of the Companies. It ignored entirely the promise of the Government of India to introduce a scheme for the reduction of debt, made in para. 68 of their despatch of 1883 (see page 304). The difficulties created are now felt by the Government and they are trying to meet them by raising the Rates and Fares and by additional taxation. We must watch the developments. In our opinion, the resources of the people cannot bear the enhanced charges, and the people will and do feel the stress of the increased costs of living caused by the extra taxation. As we have already remarked, the proper remedy for the difficulties is to very largely reduce the working expenses of the railways and to keep down the number of wagon stock by more advantageous and expeditious use of the stock already provided, unless the data clearly prove the need for additional wagons.

Separation of Railway Finance impracticable.—The Committee considered the suggestion made more than once and repeated by some of the witnesses that Indian Railway Finance should be

kept entirely separate from the general finances of the Government of India. This meant that the capital to be provided for railway purposes should be determined solely with reference to the requirements of the railways, and that the decision should not be influenced by considerations relating to the general financial position of the Government of India. The Committee remarked—

“ This does not appear to us to be practicable. As long as the money required for railway purposes has to be provided by or on the credit of the Government, so long must the supply of money depend on the Government's general financial situation at the time.”.....“ The only way in which the separation of railway finance from the general finance of the State could be effected would be to sell all the State railways and thus relieve the Government from all liability in connection with the raising of capital for them. This would not be possible for many years, owing to the numerous contracts existing between the Government and the working agencies. It would, moreover, in our opinion, be an unwise policy, since it would transfer to the purchasing companies in perpetuity a growing source of revenue, instead of allowing the Government and through the Government, the tax-payer to enjoy a due proportion of the increasing yield.” (para. 29).

This decision was perfectly sound. The cry for a separation of the railway finance from the general finances of the Government of India was made not by the Indian public but by Europeans interested in the promotion of Companies for the working of Indian Railways, who also advocated a rapid extension of railways in India without regard to the other requirements of the country.

Lapses of Budget Grants.—The Committee explained there was a good deal of misconception about what is known as the “ Lapse ” of that portion of a grant for capital expenditure on a railway, which is not actually spent on that railway within the year for which the grant is made. The unspent balance of a grant lapsing in one year is added to the grant for the next year provided the finances of the Government of India for the next year admit of such addition; when, however, the addition is not possible owing to insufficiency of the money available for all

purposes of the Government, individual railways imagine the money they had surrendered in the previous year was not reallocated to them in the next year, but the fact is that the surrendered money is included in the allotment for the next year, though the grant applied for that year is sometimes curtailed owing to financial stringency. In cases where a portion of a grant is surrendered by one railway in good time, such portion is sometimes allotted to *another railway for expenditure within the same year*. Thus the Budget grant taken as a whole for all the State railways is utilized as advantageously as the Government find it possible, since all State railways in India are taken as one concern in the matter of allotment of funds for capital outlay. The grants for such outlay could not be set aside for each individual State railway to be carried forward from year to year. This is only possible when the finances of the Government of India admit of sufficient grants out of the money available.

To obviate the lapses of grant caused by delays in the supply of rolling stock and other stores from England and other countries, the Committee considered two alternative proposals, one was by the Hon'ble Mr. J. F. Finlay, C.S.I., then a member of the Governor General's Council, that the grants (except the portion for new lines) be allotted, not, as at present, immediately before the commencement of the year in which they are to be spent, but twelve months earlier.

The Committee, however, found themselves unable to recommend the adoption of this proposal (para. 35 of the Report).

The Hon'ble Mr. E. N. Baker, C.S.I., another member of the Governor-General's Council, proposed an alternative scheme, *viz:*—

[1] That the amount to be expended in each year (called the programme grant for the year) be fixed;

[2] That a reserve fund of £5,000,000 be formed, without delay, by increased borrowing if possible, but if not, by accumulating so much of the moiety of the profits on coinage that is available for making up the programme grant of the year as is not required for that purpose, together with the whole or a part of any excess of the actual revenue surplus of the year over the estimated surplus;

[3] That this reserve be drawn upon to make up the programme grant in years in which the funds that can be provided by the Secretary of State shall fall short of that grant.

"If it were found possible to build up and maintain a considerable balance at the credit of the proposed reserve fund, this scheme would," remarked the Committee, "no doubt have the result of ensuring a regular allotment of money year by year for railway purposes; but in existing conditions, when by fully utilizing the fund available from all sources, it is difficult to meet the pressing requirements of the railway system, it is impracticable to create such a reserve fund as Mr. Baker proposes. To do so would be to set aside money urgently needed for immediate expenditure in order to form a fund for use in future eventualities, and this course appears to us to be one which it would be very difficult to justify. Mr. Baker's idea might however, to some extent, be carried out when market conditions permit of unusually large loans being raised on favourable terms, as suggested by Lord Rothschild and Mr. Alexander Wallace." (para 36 of the Report).

The lapses of Budget grants and the delays in the supply of rolling stock, which caused considerable inconvenience and difficulties in the provision of funds, were due to India being dependent upon foreign countries for the supply of rolling-stock and iron-work. The real remedy for this lies in the arrangements which will ensure the supply of these articles within the year in which they are ordered and required. Such arrangements are now possible with the establishment of the Tata Iron-works in India. As regards the building of rolling stock, this work has been done in the workshops of the Rajputana Malwa Railway at Ajmer since the Engineers' strike of 1896 in England, with clear advantages to the railway and the people of India. To the railway, savings of about 20 per cent. were effected in the cost of the rolling-stock, while employment for 5,000 extra workmen was found in the workshops. The same arrangement should be instituted on the other railways in India. To do this efficiently, the railway workshops will perhaps need extra machinery of the latest (improved) designs. To improve the efficiency of the men, technical schools should be established in connection with the railway Workshops as suggested in Section 8 of Chapter II, pages 174-85.

Use of private wagons in England.—In connection with the supply of wagons for use on Indian railways, the question of the provision by colliery proprietors and other traders of their own wagons was raised and the Committee saw no reason to recommend that “the system of the private ownership of wagons should be introduced into India.” This system, the Committee remarked was in extensive operation on the railways in England, but it was regarded with great dissatisfaction by all the railway administrations there, who would be glad to see it abolished. The opinions of the executive officers of several of the leading English railways were communicated to the Committee. In the case of one line the opinion expressed was that private wagons were the greatest trial in the life of a Traffic Goods or Mineral Manager. They had nothing to recommend them.....The amount of shunting necessary was colossal and the cost of this was enormous. The General Manager of another important line stated that the system of private wagons was fraught with inconvenience. A third company remarked—

“There are about 700,000 private wagons in use in this country. The relief from capital expenditure on the part of the railway is enormously over-balanced by the great additional cost of shunting involved by the necessity for sorting out these wagons....., were it possible to remove from the public the right to own private wagons, every company in the Kingdom would combine to such an end” (para. 11 of the Report of the Committee).

We have no objection to the recommendation of the Committee on this point.

Raising of Railway Loans in India.—In 1869 the Government of India proposed the raising of railway loans in India or in England, according to which might, from time to time, afford the cheapest market. In replying in March 1869, the Secretary of State, Duke of Argyll said that “as a general principle when a loan is required, it is desirable that it should be obtained in India, if it can be done on terms nearly as favourable as in England,” that “it is only when loans are obtained in India that the native

capitalists subscribe to them, and that is a very important consideration ;" as "when loans are raised in England the interest must be paid" there, which adds to the very large sum annually remitted to meet the disbursement in that country.

Lord Salisbury on 23rd July 1874 laid down "that all loans for public works be raised in India, it being inexpedient to increase the home charges in England."

The Select Committee of 1879 were clearly of opinion that loans for public works in India should always be raised in India, unless the Secretary of State in Council should be satisfied that the difference between the rates of interest in England and India is so considerable as to afford full compensation for the disadvantages which inevitably attend borrowing in this country" (England). The Select Committee of 1884, however, quoting the foregoing words, recommended that "the Secretary of State in Council should not hesitate to borrow such moderate sums in "England" as will enable the Government of India to complete such public works as shall have obtained his sanction."

The Mackay Committee of 1907 recommended still more boldly that the Government of India shall borrow $7\frac{1}{2}$ millions annually or more if obtainable in England, and make up 5 millions from several sources in India. We differ from the recommendations of both these Committees, and consider that the policy laid down in 1869 and 1874 by the Duke of Argyll and Lord Salisbury was perfectly sound and should be restored.

Objections have been justly raised in India to the borrowing of foreign capital, not so much on the ground of the burden of remitting the interest, but because the use of such capital leads to exploitation of India by foreign agencies. Although the system of borrowing capital for Indian Railways in England does not directly give any authority to the lenders to exploit the country, still the employment of British Companies as agents for construction and working Indian Railways has every element of objectionable exploitation. These companies have not only been pushing on foreign trade by charging lower rates for the carriage

of export and import goods than they charge for local traffic and local industries, but they have been employing foreigners almost exclusively in all the higher posts of their service. Thus the cost paid for obtaining foreign capital is unduly higher and there is a loss of wealth, work, experience, and wisdom which go away as the men retire to foreign countries. The resources of the State are doubtless developed but its people have not been benefitted to the extent they ought to have been, and have not had due opportunities of acquiring aptitude for higher work on the railways; the most they have got is generally wages for low workmanship, and this is no recompense for the enormous advantages reaped away from the country. Under these conditions the use of British capital and companies cannot be said to be an unmixed blessing to the country.

The principles to be observed by Government in borrowing money for public works in India, which were adopted in Lord Lawrence's time and in Lord Mayo's time were described as follows by the late General Richard Strachey, R.E., C.S.I., F.R.S. in his answers to questions Nos. 9-13, 120 before the Select Committee of 1884.

The first principle was that the borrowings should be limited to the amount which the capitalists in England and India, who had spare cash, were prepared to invest in Government securities at the time, without raising the current rate of interest.

The second principle was that under no circumstances could it be safe to allow the capital debt on account of railways to be increased, so that the net charge of interest upon the capital laid out upon railways by the State, after setting off the receipts from the working of the lines, should exceed whatever amount it might be considered possible or reasonable to apply from the revenues, year by year, to stimulate the extension of railways, i.e. the sum available annually to meet interest on capital out of the general revenues of the State. (Answer 120).

These two principles allowed reasonable amounts to be annually spent on railway extensions out of the general revenues.

of India, together with such amounts raised by loans as would not raise the net interest charge upon the total debt for railways, beyond the net earnings of the railways.

To these amounts, the Committee of 1907-08 added further sums shown at page 374 *supra*.

The Committee of 1907-08 ignored also the recommendation of General Strachey contained in his answer to question No. 197 before the Select Committee of 1884, where he said—

"I, in common I think, with many people who have interested themselves in Indian finance, have a very strong disinclination to do anything which shall add to the sterling liabilities of the Secretary of State. I think whether it is in the shape of a guarantee of interest in sterling or the creation of sterling debt, the increase of home liabilities is greatly to be deprecated."

The system of borrowing large sums of money in England for Indian railways is wrong in principle. Railways have been pushed on in India with too much rapidity which is not at all necessary now, as the main lines have been completed. Any branch lines, or others required should be built with capital raised in India, and with material manufactured in the country as far as available. It is detrimental to larger interests of India to employ foreign capital, use foreign manufactures, and employ foreign agencies or staff to construct and work Indian railways. Government should not allow the country to be exploited by foreign capital for the gain of foreigners to the detriment of the country by loss both in money and experience of working. When it is necessary to borrow capital from England, it should be obtained by direct Government borrowing and not through the agency of companies, at the market rate of interest as the price for using such money, the lenders should have no control whatever either on the capital lent or on the business undertaken with it.

Effect of borrowing in England on Exchange:—The Select Committee which in 1876 enquired into the subject of the depreciation of silver, referred to three main causes as having had a

great effect on the price of silver, namely:—

(1) The cessation of the coinage of silver in Germany, and sale of her superfluous silver, combined with the limit of the coinage in the mints of the Latin Union;

(2) The large production of silver in America; and

(3) The sale of the bills on India.

As regards the last item, India has to remit to England annually to meet:—

(a) Interest on loans taken from that country for various purposes,

(b) Pensions and leave allowances of its servants, and

(c) Other charges of Government.

At the same time India exports large quantities of its produce to Europe, for which she receives the value in cash. Merchants who buy this produce in India, bring the money by buying Council Bills which the Secretary of State sells weekly in England. The result of this is that the merchants of Europe pay the cash in England instead of bringing it out to India, and the Indian Government has to pay the cash upon Council Bills in India instead of remitting the cash in gold or silver to England. The two transactions, *viz*:—India's remittances to England and receipts for the value of her exports are adjusted without any cash passing from and to India, so long as the value of her net exports (after deducting the value of her imports from Europe) does not exceed her Home charges for interest, pension, leave allowances, etc. When her net exports exceed these charges, she receives such excess in gold from England. And when she takes loans in England for railways the balance of such loans after meeting the price of stores purchased there, is also remitted to India in gold, or upon the Secretary of State's Council Bills sold in London.

In answer No. 6101 before the Select Committee of 1884, Mr. Henry Waterfield said:—

Without asserting "that this is the chief cause of the low price of the rupee. I think there can be no doubt that the necessity for remitting a great quantity of produce to England, in order to discharge payments in this country (England), tends to prevent the rupee from rising in value."

The Secretary of State sells the Council Bills mostly to meet the Home charges; if these be met by gold remittances instead of by exports, or if these liabilities were cleared, there would be no occasion to sell Council Bills and the value of the rupee would remain normal. When sterling loans are raised in England for the prosecution of public works in India, there is again an improvement in the exchange value of the rupee, as the amount of remittances from India for the purposes of Government are reduced. A rise in the value of the rupee may check the export trade of India, as the money or goods sent from Europe would obtain less articles of Indian produce in exchange; but if the produce in India be in abundance or the demand in Europe for Indian produce be great, there may be no diminution in exports from India. The price of such exports would be brought to India in gold since the Council Bills would not be sold. When large quantities of gold are brought to India, gold becomes cheap and the value of the rupee rises. Therefore sterling loans taken in England and excess in exports over imports cheapen gold and raise the value of silver, provided the production of silver does not at the same time go up. If it does, the value of rupee would not rise. But if Indian exports are made only to discharge Indian liabilities for Home charges (interest, pensions, leave allowances, etc.), without importing European goods, the Council Bills would be in demand, in order to pay for the exports and the exchange value of the rupee would be normal if it does not actually rise. If, however, India remitted the Home charges in gold, the Council Bills would still be scarce and the exchange value of the rupee would certainly rise.

But if Indian loans in England cease to be raised there and increased amounts of interest have to be remitted to England, the effect would be precisely that which occurred after 1868, when the guaranteed railway companies' operations began to be restricted and exchange fell rapidly; the export trade would receive a stimulus, and the tendency of prices of Indian produce as measured in sterling would be to fall.

In a good season when the produce in India is abundant, the demand for Council Bills is sure to largely exceed the Government requirements. If the crops fail, or if the local demand in India is too great to admit of their export; there is no resource but to borrow in England for the current requirements of Government, which only intensifies the difficulty in future years. *For this reason it is very desirable for Government to borrow money locally in India.*

"This is an unmixed good," said Mr. Waterfield in his answer No. 6104, "but directly the money has to be obtained from abroad, an element of danger comes in, and it then becomes a calculation how far the good to be obtained from a profitable employment of the capital outweighs the evil of a drain to pay the interest to the foreigner. I think that foreign capital should be obtained sparingly and equably; sudden expansions of outlay are perhaps even more wasteful than sudden reductions."

A low rate of exchange is a benefit to the producer not to the consumer; but as it works round in the end to a reduction of the sterling price of his produce, therefore he does not gain to the same extent as would otherwise be the result by the stimulus given to exports (6257-58). He gets some benefit of course, not all that the increased number of rupees he gets represent superficially, as the value of the rupees is depreciated by the low exchange.

Asked "Where, in your opinion, should the line be drawn between the raising of a loan in India or England," Mr. Waterfield answered—

"I do not think it possible to lay down any precise rule; but, speaking generally, I hold that *loans in sterling should only be raised in repayment of other sterling liabilities, or in cases of emergency.* I think it better to pay more interest and to let the generation which incurs the debt feel the pressure of doing so, than to risk the imposition of a greater burden on posterity. It seems to me better now to borrow a crore at 4 per cent. in the metal in which India receives her revenue, the interest being 4 lakhs a year, than to borrow £928,571 (at 1s. 7½d.) at 3½ per cent. in a metal only connected with her revenue by a fluctuating rate of exchange." (Para. 6119). *Italics are ours.*

According to mathematical formulæ prepared by Colonel (afterwards General) J. S. Trevor, C.S.I., R.E., Secretary to the Government of India P.W.D., in 1884, if the rupee fell from 1s. 7½d. to 1s. 4½d. in 20 years, and if interest had to be paid at 4 per cent. upon a rupee loan raised in India, then under these circumstances it was quite safe to raise a sterling loan at 3½ per cent. If the expected fall was likely to be very slow during the first ten years of depreciation, as much as 3⅔rd per cent. would be safe. That is to say, if in twenty years the rupee was to fall to 1s. 4⅔d., it was better, from a mathematical point of view, to borrow at 3.5 per cent. in England than at 4 per cent. in India; and if the depreciation was slow, as much as 3⅔ per cent. might be a safe rate to borrow in England.*

All these considerations go against borrowing in England, except in a case of an emergency like war on an Indian border, etc.

Use of surplus Balances.—In 1862 Sir Charles Wood urged on the Government of India the importance of using surplus balance in the construction of Productive Public Works, and the Select Committee of 1879 laid down that when surplus revenue was used instead of borrowed money, for the construction of productive public works, the general debt of India should be treated as relieved and productive Public Works debt increased to that extent. In 1881 Lord Hartington stated the objects to which surplus revenue may be applied, and laid down that in the event of a *bonafide* surplus of revenue over expenditure being realized in any one year and not otherwise appropriated, any such surplus may, at the discretion of the Government of India, be added in the following year to the amount borrowed for Productive Public Works, subject to the abovementioned condition laid down by the Select Committee of 1879. In 1908 the Committee on Indian Railway Finance recommended the allotment of 100 lakhs of rupees annually out of the Revenue Surplus for capital expenditure on railways. This must be in

* Para. 7180 of Evidence before the Select Committee of 1884.

addition to the interest and other liabilities on account of railways which are usually met from general revenue. As surplus revenues are not always accidental, but to a large extent point to additional taxation, it is necessary for the Legislature to see that the taxation is properly regulated, so that a surplus may not ordinarily come out.

Use of revenue for Railway purposes.—According to the orders issued by Sir Stafford Northcote in 1868, a limit was to be fixed of the annual charge on the revenue of India on railway account. Lord Lawrence fixed this limit in 1869 at 2 millions sterling or 200 lakhs of rupees per annum, based upon the deficits of the guaranteed interest which had been paid to railway companies. In 1874 Lord Salisbury authorized that famine preventive works might be made out of revenue of the year. The general policy with regard to productive State Railways upto 1876 was that any additional interest on account of money borrowed for the construction of such railways would be met from the receipts derived from similar railways which had been or would, from time to time, be completed and brought into operation.†

In September 1878, the Government of India proposed to accept a yearly maximum dead weight charge, to be fixed as experience might suggest, for works constructed, "in order to prevent famines or give protection from famine or diminish the expenditure for the counteraction of famine if it occurs," *i. e.* "they would limit to a specific maximum amount the net expenditure for the interest on the capital cost of all such works and their maintenance, after setting off all the net income yielded by the works."† The Select Committee of 1879 did not, however, accept this proposal, as they thought, with the growing interest charge and uncertainty of net income from the works, the plan was futile as a check upon the capital expenditure. Accordingly they laid down certain checks upon this expenditure and fixed the maximum limit of borrowing at 2½ millions sterling per

† Report of the Select Committee of 1879, page xviii.

annum for the construction of railways, in addition to any sum which could be devoted to this purpose out of the surplus revenue of a year. This was of course in addition to the existing liabilities on account of the old Guaranteed Railways, which were treated at that time as expiring.

The Select Committee of 1884 noted that a sum of 71 crores of rupees had been met from Indian Revenues for railway charges from 1848-49 to 1884-85, that the yearly charge varied from a maximum of nearly 236 lakhs (without interest on the accumulated charges) in 1878-79 to a minimum of 20½ lakhs in 1881-82;* and although they enlarged the limit of £2,500,000 for annual borrowings for the construction of public works, they laid down no limit for the annual charge against the Indian revenue. They, however, most emphatically endorsed the declaration that "the proposed extension of railways should not involve additional taxation."†

Including, however, the *capital* cost of railways met from revenues, the maximum annual charge against the revenue of India on account of all classes of railways was Rs. 3,37,00,841 in the year 1879-80. In 1883-84 it was reduced to a net *gain* of nearly 20 lakhs. From 1884-85 the *net charge* began to rise, in 1892-93 it rose to Rs. 3,31,63,910, after which it steadily declined to the end of the last century. From the year 1900-01 the railway operations have shown *net profits* to the State, except in the year 1908-09, when the abnormal trade depression throughout the world and the calamity of the famine in India, brought about a net charge of Rs. 1,86,45,985. After that the revenue received credits from the railway operations. In 1918-19 these credits cleared all the arrears of actual payments from the revenue but there was still an outstanding of Rs. 2,97,97,12,000 on account of interest on those payments.‡

* Para. 18 (1) of the Report of the Select Committee of 1884;

† Paras. 33 and 34 of Report of the Select Committee of 1884;

‡ Appendix No. 8.

Further Expenditure and Extensions of Railway.

The Presidential addresses at the annual meetings of the Indian Railway Conference Association in 1916 and 1920 laid stress to requirements of additional funds both for Revenue and Capital expenditure. Under the former head large arrears of renewal work have to be carried out. Money for them must be found from the railway earnings. The difficulties now experienced are due to the omission on the part of the Railway Administrations themselves to create the necessary Reserve Fund, see page 45 *supra*. As regards capital expenditure, the Member for Commerce and Industry informed the Association on 13th October 1920 that if they got enough to keep the open lines in order, it would be all that they should get from the Government, that there would be very little money available for new railway construction. He advised the representatives of the companies to inquire of their London Boards and to take such steps as they could, to consider whether capital cannot be raised by means of rupee share capital or by means of rupee debentures. As regards the improvement of the open State lines, we do not advise Government to borrow any more money; such works should be met from the surplus profits only of those lines, after meeting all liabilities on their account. It is open to companies registered in India to undertake extensions of their own lines or new railways altogether, provided they can raise the money. We do not see any occasion for the Government to offer any exceptional terms. We have more than enough of railway lines to meet the actual requirements of the country. Future extensions should be left to private enterprise, under the terms already in force, with the exception that the rate of dividend with the rebate from the main line earnings be raised from 5 to 8% on the paid-up capital in view of the fact that the Bombay Government has lately raised a loan at 6½% free of Income-Tax. We know there are a number of projected lines, which it is desirable should be constructed, but it is high time now, after 70 years' experience, that private enterprise should step in and provide new railways

without throwing further burdens on the general tax-payer. Such enterprise will ensure economy and healthy emulation on railways generally.

As regards the question of providing additional rolling stock we have already referred to it at pages 76-77 *supra*. We are not sure that full use is made of the stock already provided. Appendix 10A shows that the average run made by wagon stock during the second-half of 1919-20 was —

1·60 miles per hour on Broad-gauge railways,

1·40 " " Metre- " "

This included the mileage of empty wagons, which amounted to 31·59 and 23·45 per cent. of the total duty on the two gauges respectively. These figures show that the actual work taken from the wagons is very low. It only gives the speed of Bullock-carts on unmetalled tracks.

The actual speed of goods trains on long journeys in 1902-03 gave averages of 3·7 to 12 miles an hour on the Broad-gauge.*

The causes of such low duty ought to be ascertained. The wagons either remain idle at times, or are kept in slow journeys, often detained *en-route* or carried by circuitous routes under competitive rates, or are long detained in the Workshops for repairs.

The haulage of empty wagons may be due to uneven flow of traffic in the up and down directions. It is largely due to the policy of carrying raw produce to Calcutta, Bombay, and Karachi for export to foreign countries. While this traffic is carried at low rates, it involves much empty running. By manipulation of rates for internal traffic, some of the empty running might be avoided.

Another point which requires attention is the proper loading of wagons, with various kinds of goods. Trained loaders are required, especially at large centres of trade and at tranship-stations. By a systematic loading, goods carried in wagons may be appreciably increased. At tranship-stations, where there is a break of gauge, great skill is needed to economically tranship contents of wagons of one gauge into those of the other gauge,

* Para. 181 of Report by Mr. T. Robertson 1903.

without causing light running, especially in dealing with bulky goods like *kapas*, hay, firewood, etc. The carrying capacities and cubical contents of wagons of the two gauges ought to be in some relation to each other; the stock should be suitably constructed, so that the contents of one Broad-gauge wagon may be conveniently transferred into one bogie or two four-wheeled wagons of the metre or narrow gauge, and *vice versa*. Well-trained staff of loaders alone can do this economically.

With these facts before us, we should be extra cautious in building extra wagon stock, which increases interest on capital and adds to the working expenses and depreciation charges.

We are not in favour of keeping divided interests in the State Railways. If all State Railways in India were worked as one concern, the hire system for rolling stock would disappear. For years past I have been advocating this change. In the articles on State *versus* Company management, which I contributed to the *Leader* of Allahabad in 1915 and 1916, I suggested the abolition of the divided interests in the State property created by the different Companies, and the free use of the State Rolling Stock on any State Railway.

The recent appointment of the Director of Wagon Interchange by the Indian Railway Conference Association is a step in the right direction, but this officer would be under the Government control if the companies were out.

Another effective remedy for keeping down the number of wagons is making greater and more frequent use of wagons, by running lighter goods trains at a higher speed and prevention of detentions to wagons at starting, at intermediate and at engine-changing stations and junctions *en-route*, as suggested in paras. 181-190 and 247 of Mr. Robertson's Report of 1903.

On 31st March 1920, there were 36,735 route-miles of railways open for public traffic, while 2,044 miles were sanctioned or under construction. Whereas the Famine Commission in 1880

considered a length of 20,000 miles of railway would "meet all possible demands likely to be made for the distribution of food in time of scarcity," while the scheme of Lords Lawrence and Mayo provided for 15,000 miles only. We have more railways than were required under those schemes.

The Committee on Indian Railway Finance 1908 believed that even 100,000 route-miles of railways is short of that which will ultimately be found to be necessary in India and were convinced "that there will be fruitful fields for large reproductive expenditure on railways in the country for many years to come." "The new lines," they remarked, "would not only be remunerative in themselves but would add materially to the revenue and largely develop the resources of the country" (para. 12 of their Report).

Railways can produce good results only where the people know the utility of the railway and are well trained for manufacturing industries. On pages 51-57 *supra*, we have dealt with this aspect of the matter. We should like to see more railways, but not until the people can themselves build and work the lines and develop their industries. The recommendations of the Mackay Committee did not represent Indian interests; they represented the views of foreigners who are busy in exploiting the country. The latter are either unaware of the conditions prevailing in the country or ignore them.

Those who are real well-wishers of India, will, we feel sure, agree with us and help to provide necessary Technical schools and Colleges for the training of Indians in mechanical and Electrical Engineering, so that they may take a prominent part in the provision of further railways. Whatever railways are now to be built, they should either be owned and worked by the State or be purely commercial undertakings for convenience of the people and for development of Indian industries. So far as the State is concerned, we draw attention to the remarks at page 49 *supra* regarding the additional taxes imposed during the last forty years. That matter requires very careful investigation.

In the meantime the declarations of Government (see pages 4 and 329) that the expenditure on railways does not, under any circumstances, justify additional taxation, must be prominently borne in mind in arranging future expenditure on the railways. The Committee of 1907-08 on Indian Railway Finance completely ignored them.

As the programme of 1884 has been more than fully carried out, the promise of Lord Ripon's Government recorded at page 303-04 *supra*, should now be fulfilled and railway expenditure from the general revenue of the country stopped altogether and a scheme for the reduction of railway debt formulated, leaving the future extension of railway to private enterprise.

The main lines have been provided, further extensions may be made by providing branch or feeder railways. These should be designed for such a gauge as might answer the requirements of the locality, with a margin for future developments. It is not absolutely necessary to have the same gauge as the main line. The structures should generally be of a cheap design, except bridges which should be sufficiently strong and durable for the traffic.

The Annual Administration Report of the Indian Railway Board publishes a list of the projected railways and tramways, also the terms upon which private Companies are invited to raise the money for such lines.

Several firms of European Merchants in Bombay, Calcutta and Karachi have floated Branch Railway Companies with Indian money, making good profits for themselves and for their shareholders. This business is generally unknown to Indian merchants. Many of the Railway Companies formed after 1880, have been promoted by retired European officials of India. The example of the European Merchants and retired European officials may well be followed by Indians. Something in this direction has been done in Bombay and Calcutta. There is no reason why Cawnpore, Delhi, Lahore and other Commercial cities of India should not do the same and form syndicates to obtain the concessions offered by

the Government of India, and float private companies for the construction and working of Railways in their own provinces. Section 6 of Chapter VI, and Appendices II to XIV show the terms upon which railways of the various classes have been provided and are being worked in this country.

Budget Estimates and Financial Statements.

Heads and Sub-Heads of Railway Expenditure and Revenue.

The capital expenditure on the old Guaranteed Railways was not recorded in the Expenditure Abstract of Government of India, nor has the capital outlay on railways owned by other private companies, been shown in that Abstract. The payments, however, made on account of the companies, out of the Indian Revenue have been shown in those accounts. As regards the State Railways, totals of their receipts and expenses are shown in the Revenue, and Expenditure Abstracts attached to the Annual Estimates and Financial Statements.

The capital expenditure on the State Railways at the commencement was treated as Extraordinary and shown separately from the ordinary charges met from Indian Revenue. It was at first classed under two main heads, *viz* :—

- (1) Productive Public Works, and
- (2) Protective Works.

Productive Railways were built out of borrowed funds.

In the Abstract Statements attached to the Annual Financial Statements and Budget Estimates of India, upto the year 1884-85, the Railway figures appeared under the heads and sub-heads noted below :—

Revenue Abstract A.

G. Revenue from Productive Public Works.

XXV. State Railways (Gross Receipts).

XXVI. Guaranteed Railways (Net Traffic Receipts).

H. Receipts from Public Works not classed as Productive :—

XXIX. State Railways.

XXX. Subsidized Railways.

Expenditure Abstract B.*E. Miscellaneous Civil Charges.*

31. Exchange.

F. Famine Relief and Insurance.

33. Protective Railways.

G. Expenditure on Productive Public Works Revenue Account.

36. State Railways—Working Expenses.

37. Guaranteed Railways.—Interest and Excess Profits.

39. Interest on debt incurred on Productive Railways.
Annuities on purchase of Guaranteed Railways.*H. Expenditure on Public Works not classed as Productive.*

40. State Railways capital.

41. State Railways Revenue (Working Expenses).

42. Subsidized Railways.

Southern Mahratta Railway.

43. Frontier Railways.

N. Expenditure on Productive Public Works Capital Account.

50. State Railways.

The expenditure charged to heads E 31 (in part), F 33, G 36, 37 and 39, and H 41 to 43 was met from the general revenue of India, to which account were credited the receipts in Abstract A under heads G-XXV and XXVI and H-XXIX and XXX; while the expenditure charged to head N 50 was provided from borrowed funds (including surplus balances), the interest on which was debited to head G-39.

From the year 1885-86, the Budget heads and sub-heads were altered as shown below :—

Revenue Abstract A.*E. Miscellaneous.—*

XXIV. Gain by Exchange on Railway transactions.

H. Railways.—

XXVI. State Railways (Gross Earnings).

XXVII. Guaranteed Companies (Net Traffic Receipts).

XXVIII. Subsidized Companies. (Repayment of advances of interest).

Loans taken for Railways were recorded in Abstract C, under the main head O, and the Capital Receipts from Railway Companies, under the main head S.

The railway expenditure was recorded in Abstract B, under the main heads and Sub-heads shown below :—

E. Miscellaneous Civil Charges.

31. Loss by Exchange.

F. Famine Relief and Insurance.

34. Construction of Protective Railways.

G. 37. Construction of Railways charged against Revenue in addition to that under Famine Insurance.

Note.—This head was subsequently abolished and a new Head introduced as under :—

K. Other Public Works.—

44. Construction of Railways charged to Provincial Revenue.

H. Railway Revenue Account.

38. State Railways.—

Working Expenses.

Interest on debt.

Annuities in purchase of Railways.

Interest on Capital deposited by Companies.

39. Guaranteed Companies.

Surplus Profits, Land and Supervision.

Interest.

40. Subsidized Companies.

Land, etc.

Advances of Interest.

41. Miscellaneous Railway Expenditure.

N. Expenditure not charged to Revenue.

47. State Railways.

After 1901, the Revenue Abstract A takes instead of Gross Receipts, Net Receipts only under Head H after deducting the

Working Expenses and Surplus Profits paid to the Companies, and omits these from Abstract B. We do not like this arrangement, for the reason that it lowers the Total Revenue and Total Expenditure figures of the Empire.

The former arrangement showed the correct totals.

Railway Budget.—The Indian Budget as it is presented to the Legislature at present, does not give such details of the expenditure on each of the railway systems as would enable the Members to criticise the Budget. The railway Budget should be largely expanded and should give the same details as are given in the Authorization Rolls of each administration. At present the Honourable Members can only make general remarks without touching the specific items of expenditure. As the Councils have now been reformed, it is necessary the Members should insist upon full details of Establishments and working estimates of each railway coming under the Programme, being furnished to the Councils and the Legislative Assembly, so that the Members may be able to effectually criticize the Budget and make practical suggestions. The discussions during the Budget debate in February 1921, showed a deplorable lack of such information, and it was surprising that the Members, who made vague remarks, did not notice the absence of the practical details; they were groping in the dark. We have just received the Budget Estimate of Denmark, a small country of three million person, for the year 1921-22. It has full details of the Establishment and Working Estimates of each Department and Administration of the State, and covers 2,379 pages Royal Octavo of printed matter. With such details it is possible for representatives of the people to check extravagance and to offer useful suggestions. It is impossible for any man to criticize any administration on mere totals of Receipts and Expenditure without knowing the details. In the case of Railway Expenditure especially, full details are necessary as suggested above.

CHAPTER VII.—RATES AND FARES.

SECTION 1.—General History of early period.

CLAUSE 8 of the original contracts of the old Guaranteed Railway Companies provided that the Companies “shall be authorized and empowered to charge such fares for the carriage of passengers and goods and such tolls for use of the said railway, as shall have been approved by the Government, and shall not in any case charge any higher or different fares or tolls whatsoever, without such approval being first obtained; but fares or tolls shall, when such net receipts as are hereinafter mentioned shall in any year have exceeded 10 per cent. upon the outlay, be reduced in accordance with any requisition of the Government in that behalf but only with a view of limiting the said fares and tolls so far that the net receipts shall not exceed 10 per cent. as aforesaid.”

The starting fares and rates in pies per mile on the first three railways, as they opened for the first time were as noted below:—

	G. I. P. Ry. from 1853.	E. I. Ry. from 1854.	Madras Railway.	
			from 1856.	from 1858-59.
<i>Passenger fares.</i>				
1st Class ...	24	24	18	
2nd Class ...	10	9	9	
3rd Class ...	3	3	4	
<i>Goods Rates per Ton.</i>				
Coal ...	...	7	...	...
1st class goods...	10	9	6½	8
2nd " " ...	14	13½	13½	10
3rd " " ...	18	18	20½	12
4th " " ...	20	27	...	...
5th " " ...	30	54	...	...

The Government Director of Railways, India Office, in his Annual Report on the Indian Railways for 1860—61, made the following note:—

“46. A revision of the charges has since been made, and it is understood that an improvement has already taken place in consequence. The former high rates and other causes operated to prevent traffic from coming to the line in the Deccan, for notwithstanding the facilities of transit offered by the rail, the amount of goods on the old high road had not diminished.”

Again in 1861-62, he wrote: “The perplexing problem of rates and fares still remains to be solved. Experiments have been tried with varied success, but the incomplete state of the undertakings adds to the difficulty of ascertaining the precise rates which are most suitable and remunerative.....”

“A very judicious arrangement has been proposed for the settlement of the matter, *viz*:—that the Government should, instead of fixing the actual fares to be charged, approve of a scale of *maximum* rates, leaving it to the Company's Officers, in communication with the Consulting Engineer of Government, to impose such rates from time to time, within the prescribed limit, as may be found to be conducive to the interests of the undertaking.”

In 1869-70, the same officer reported that “in many places the road and the river are still used in preference to the railway.”

That the financial success of a railway depends very largely upon the judicious manipulation of its rates and fares for goods and passenger traffic, was fully demonstrated by the experience gained with the working of the old Guaranteed Railways. Not knowing the requirements of the Indian public, the Companies began experimenting with high rates which the traffic could not bear or the people could not afford to pay, with the result that the traffic receipts were very low; while the traffic both in goods and passengers continued to go by road and in some parts by water for a long time.

The bulk of the traffic both in passengers and goods has

always been in the lowest class. This was found out in the very early days of the Indian Railways. The Government Director in his Annual Report for the year 1865-66, recorded that 94 per cent. of the passengers and 97 per cent. of the goods were in this category.

For passenger traffic an experimental fare of $1\frac{1}{2}$ pies for the 4th class styled as "Coolie" class, was tried on the G. I. P. Railway, as early as the year 1861; the number of passengers and earnings therefrom considerably increased in the very first six months, but the railway company finding some extra expense involved, discontinued the low rate. The Government Director of Indian Railway Companies repeatedly wrote in his Annual Reports on the importance of low rates and fares but the companies would not lose one in the hand for two in the bush. They were slow to realize the fact that by reducing the rates and fares for the lowest class to the lowest limit, they would earn the maximum of profit.

Doubts were at the very start entertained whether Indians would ever use the railway and it was not until 1862, when the Government Director observed that although the Railway Managers had much difficulty in ascertaining the precise rates which were most suitable and remunerative, yet one point was unquestionably proved and that was "that the people of India are similar to the people of every European country in their disposition to travel."

The passenger fares on the first two Indian Railways actually in force in 1861-62 were as follows :—

	E. I. Ry.			G. I. P. Ry.
	Pies per mile.			Pies per mile.
1st Class	18	18
2nd Class	9	6
3rd Class	3	2
4th ("Coolie") Class	$1\frac{1}{2}$

About the year 1864-65 the East Indian Railway raised their fares for the 3rd class from 3 to 4 pies, and the G. I. P. Railway

raised both the 3rd and 4th class from 2 and $1\frac{1}{2}$ to 4 and 2 pies respectively. In para. 46 of his Report on the Indian Railways for 1865-66, the Government Director wrote:—

“There has been a tendency during the past year to increase the rates and fares owing to scarcity of rolling stock.” “At some of the stations on the East Indian Railway, such was the demand for trucks, that it is supposed bribes were given to secure a preference; and it was proposed by a Committee appointed to apply a remedy, that the trucks should be put up to auction, ignoring altogether the established rates. This would not have been a proper arrangement and it was accordingly decided to fix higher charges generally.”

The Secretary of State, decided in 1867 on fixing the maxima rates and fares, within which the Companies had the option of varying the actual charges made to the public. The Government of India delegated the settlement of maximum rates and fares, to the Local Governments, merely reserving to themselves a power of interference in those matters in which it seemed expedient to fix a general policy, and to regulate matters by which a Railway Company within the territories of one Local Government might affect a Railway Company working within the territories of another Government. The following matters were accordingly retained in the hands of the Government of India:—

- 1st.—The fares for the lowest class of passengers,
- 2nd.—The rate for food grains,
- 3rd.—The rate for coal.

The only policy of the Government, as regards the fixing of rates and fares on railways, was to make them as generally useful to the mass of the people as was consistent with due profits to the Companies. The Governor-General in Council accordingly declared that—

“Unless the special sanction of the Governor-General in Council be accorded to a higher rate on any particular line or part of a line, the existing fares for the lowest class shall be the maximum on Railways already opened for traffic, and that for future cases the maximum fare shall be at the rate of two pies per mile in covered carriages without seats.”

Similarly the rates then in force for food grains and coal were regarded as the maximum on lines already opened, and for future lines the Governor-General in Council fixed one-quarter of a pie per maund per mile, or $\frac{27}{32}$ of a penny per ton per mile as the maximum rate.

For all other classes and descriptions of passengers and goods, His Excellency in Council left to the Local Governments to fix the maximum fares and rates, reserving however, the right of the Government of India to interpose thereafter should occasion seem to require it.

After further correspondence with the Secretary of State and the Local Governments, the Government of India issued another resolution dated 6th October 1868, in which the Governor-General in Council declared—

“In accordance with the recently expressed wishes of the Secretary of State, that the maxima of all fares and rates shall henceforth be fixed by Local Governments, that the actual charges within such maxima shall be regulated by the Railway Companies, and that the maxima shall leave a reasonable margin for the exercise of a discretion by the Companies in varying the working rates, as circumstance in their opinion require.”

Accordingly the following notification was published in the Bombay Government Gazette Part I, dated 30th April 1868, page 352 :—

Railway Department.

The following maximum rates for passengers and goods, for the Bombay and Sind Railways, sanctioned by Government, are published for general information :—

Passengers.

1st Class ...	...	pies 24 per mile.	
2nd „ ...	...	12 „	„
3rd „ ...	...	8 „	„
4th „ ...	...	3 „	„

On G. I. P. Ry.

The fourth class rate will become imperative on the B. B. & C. I. Ry. & Sind Railway, whenever the 3rd class rate exceeds 4 pies per mile.

Luggage.

Maximum rate 4 pies per maund per mile.

The following scale of free luggage to be allowed :—

1st Class ...	60 Seers,	3rd class ...	10 seers.
2nd „ ...	80 „	4th „ ...	10 „

Carriages.

Maximum rate 48 pies per mile.

Minimum charge Rs. 4.

Horses.

Maximum rate 24 pies per mile.

Minimum charge Rs. 2-8-0.

The Railway Companies will not be responsible for more than Rs. 400 as the value of any horse, unless insured at special rates.

Dogs.

Maximum rate 8 annas per fifty miles.

Parcels.

Maximum charge for parcels under 7 seers for the first fifty miles, not to exceed six annas.

Maximum rate for every fifty miles beyond the first fifty to be three pies per seer.

Maximum goods rates.

1st Class goods	...	...	12	pies	per	ton	per	mile.
2nd "	"	...	18	"	"	"	"	"
3rd "	"	...	24	"	"	"	"	"
4th "	"	...	36	"	"	"	"	"
5th "	"	...	54	"	"	"	"	"
For food grain	...	...	12	"	"	"	"	"
Coal	...	...	10	"	"	"	"	"

Terminal charges.

Rs. 5 per ton at Bombay & Kurrachee

Rs. 2-8-0 at up country stations.

Insurance rates.

The maximum rate for most precious articles to be 3 per cent.

The maxima rates and fares sanctioned for all the old Guaranteed Railways are summarised* below:—

				Pies per mile.					
<i>Passengers.</i>				Madras.	Bombay & Sind.	Bengal.	Panjab.	Delhi Ry.	O. & R. Ry.
1st Class	...	...	...	18	24	18	18	18	18
2nd Class	...	...	...	5	12	9	9	9	9
Intermediate	...	...	...	...	...	4½	...	...	...
3rd Class	...	...	...	3	8	3	2½	2½	2
4th Class	...	...	...	...	3(a)	...	...	...	...

*Page 795 of Report of the Select Committee of 1884.

(a) On the B. B. & C. I. and the Sindh Rys. the 4th Class for passengers was compulsory at a maximum of 3 pies per mile whenever the 3rd class exceeded 4 pies per mile.

				Pies per ton per mile.		Pies per Md. per mile.	
				Madras.	Bombay & Sind.	Bengal.	Punjab & Delhi Ry.
<i>Goods.</i>							O. & R. Ry.
1st Class	...	...	...	12	12	$\frac{1}{4}$	$\frac{1}{4}$
2nd Class	...	...	...	14	18	$\frac{1}{2}$	$\frac{1}{2}$
3rd Class	...	...	...	16	24	$\frac{3}{4}$	$\frac{3}{4}$
4th Class	...	...	...	24	36	1	1
5th Class	...	...	...	36	54	2	2
Food Grains	...	...	...	12	12	$\frac{1}{8}(b)$	$\frac{1}{8}$
Coal	...	...	...	8	10	$\frac{1}{8}(b)$	$\frac{1}{8}$

(b) All food-grains were in this class, but for distances above 300 miles they were carried at $\frac{1}{4}$ pie per maund per mile.

Under clause 8 of the Companies' Contracts already quoted, it was held that Government possessed no power to reduce rates and fares already established, until the net profits on the railway came to 10 per cent; Government could therefore only deal with attempts to raise fares and rates, or with cases in which fresh fares and rates had to be fixed for a line about to open.

The subject of the control to be exercised by Government over railway rates and fares was practically raised about the year 1867. Upto this point, rates and fares had been left to the Agents and to the Consulting Engineers to settle between them from time to time. There had been no formal settlement by Government of the rates and fares under the terms of the contracts. In February 1867, the Government of India commenting on the Secretary of State's Despatch of the 24th November 1866, to the Government of Madras, remarked that the Secretary of State assumed, that the Government should not interfere with the fares, except on the ground of their being more or less profitable to the companies, and that on this point the railway

Agent should be allowed to be the judge in the first instance. The Government of India altogether dissented from that view, and pointed out that it was a distinct duty of Government to protect the interests of the people against what was practically a monopoly. The Secretary of State replied that he thought the companies should be allowed to make such alterations in their scale of rates and fares as they might at any time think desirable. On receipt of these orders the Government of India published a circular No. 10 Ry., dated 16th October 1867, which, while giving up to the local governments the control over rates generally, retained in the hands of the Government of India the fares for third class passengers and the rates for food grains and coal. To this action the Secretary of State dissented, holding that the companies were not advocates for high rates, and that they should have a discretionary power to vary the rates in actual use. The Government of India, on receipt of this Despatch, made a further attempt to defend the people of India against the natural tendency of the guaranteed companies to develop a dividend. The wishes of the Government of India were, however, overruled by the Secretary of State in Despatch No. 48 of 25th of June 1868. On receipt of this the Public Works Secretary, together with the Member of Council in charge of the Public Works Department, advised yet a further protest against the orders of the Secretary of State. They were, however, over-ruled by the Viceroy, who considered the Secretary of State's orders final, and consequently in accordance with the orders of the Secretary of State, a list of maxima rates and fares fixed upon by Government for all open lines, under clause 8 of the contract, was formally published. In communicating their action to the Secretary of State, the Government placed on record another protest.

No sooner were the maxima rates and fares for all the guaranteed railways published, than the Secretary of State requested that the maximum scale for passengers for the Railways in the Madras Presidency, might be reconsidered, with a view to the introduction of a scale that would allow the railway companies

larger scope for making such changes in the working rates, as circumstances might require. In accordance with these orders, the maxima fares for railways in Madras were raised to the following:—

First Class	...	...	20 pies per mile.
Second Class	...	...	6 pies per mile.
Third Class	...	...	4 pies per mile.

It was on this occasion that Lord Mayo recorded the following opinion:—

"I regret extremely the maximum fare for third class passengers has been revived, and would have gladly supported the Madras Government in maintaining the 3 pies rate. It is blind policy to deal with our Native millions in this way; it is to the third class we must look to make our railways pay, and it is not by raising fares but by cheapening the cost of carriage and locomotion, &c., that we must hope to develop the enormous revenue that we are now only touching from this source. The tendency of the railway management in this direction should be checked on every possible occasion. Great political and social considerations are involved in this question and I hope that the policy of reduction of third class fares to the lowest possible point, together with the humane and considerate treatment of native passengers of the humbler class, will, on every occasion, be pressed on the railway authorities."*

In September 1869 the Secretary of State again called attention to the low maximum fares sanctioned for third class on the Oudh and Rohilkhand Railway, remarking that the fare was "one which would leave the Company no discretion in fixing the rate for actual use." In reply the Government of India pointed out the advisability of allowing their orders prescribing the continuance of this low rate till June 1870 to stand, remarking that—

"It is in our opinion a matter of the last importance that the third class passenger fare on Indian Railways should be fixed at the lowest possible amount, both in the interests of the companies and of the vast masses of the Native public, who set so little value on time and personal inconvenience that they will travel on foot or in carts for long distances

*Paras. 4313-17 of evidence of Major Conway Gordon, R. E. before the Select Committee of 1884.

unless they can actually make a money saving by going by rail. It is to this class that we must look for any returns from passenger traffic in India, and our fares should therefore be pitched so as to secure the greatest possible number."

In January 1875 the Government of India fixed the following maxima rates for goods traffic on the Oudh and Rohilkhand Railway:—

1 pie per maund per mile for High Class.

$\frac{1}{4}$ pie per maund per mile for Low Class.

$\frac{1}{2}$ pie per maund per mile for Middle Class.

as an experimental arrangement, subject to reconsideration at the end of two years. As regards the higher class these rates were very much lower than the fifth class rates sanctioned in the year 1868.

In 1878 the maximum fare for third class passengers on the Oudh and Rohilkhand Railway was raised from 2 to 2·5 pies, the Government of India apparently admitting that they had no power to do otherwise in the face of the order of the Secretary of State.*

The State Railways began in 1872 with Station to Station rates per maund of goods and fares per passenger, irrespective of the distance between the stations. They were fixed per station as follows.†

		Per passenger Annas.	Per maund of goods pies.
1st Class	...	8	4
2nd Class	...	4	6
3rd Class	...	1½	8
Special Goods	...	...	2 to 3

On the Indus Valley and Holkar State Railways, the passenger fares were:—

* Paras. 4318-19 of Evidence before the Select Committee of 1884.

† Government Director's Reports for 1878-79 and 1879-80.

1st Class	12	} Annas. Per Station.
2nd Class	...	...	...	6
3rd Class	...	...	...	2
4th Class	...	...	...	1½

These rates and fares continued till 31st December 1880.

The station to station fares worked out in pies per mile as under during the second half of 1880:—

	R. S. Ry.	W. R. S. Ry.	H. & S. N. S. Ry.
1st Class	... 10-61	9-75	16-4
2nd Class	... 4-33	3-71	8-2
3rd Class	... 2-00	2-30	2-73
4th Class	... ..	...	2-05

From 1st January 1881 the rates and fares on the Rajputana and Holkar and Sindia-Neemuch State Railways were assimilated with those in force on the East Indian Railway, & mileage rates and fares were adopted as follows:—

<i>Passengers.</i>		<i>Goods</i>	<i>Passengers.</i>		<i>Goods</i>
	Pies.	per Md.		Pies.	per Md.
1st Class...	12	0-4	4th Class...	2 Ordinary	1-0
2nd Class...	8	0-6	5th Class...	...	1-2
3rd Class...	4 by mail	0-8			

It was found that with the lowest fare at 4 pies, the Mail trains on the R. M. Railway were running at little or no profit. The scale of passenger fares was therefore altered as follows from 1st January 1882:—

1st Class	...	18 pies per mile.	
2nd Class	...	9 " " "	
Intermediate	...	3 " " "	
3rd Class Mail	...	2½ " " "	For first 100 miles,
		2½ " " "	for next 100 miles,
		2½ " " "	for next 200 miles;
		2 " " "	for distances above 400 miles.
3rd Class Ordinary	...	2 " " "	

Reserved Accommodation, 1st, 2nd and 3rd Class Carriages.
The tariff of charges adopted on the East Indian Railway from the 1st May 1876, for reserved accommodation, placed 2nd class passengers on the same footing as those of the 1st class, in securing to them a sleeping berth for every fare paid, while in the 3rd class, a compartment could be reserved at six 3rd class or two 2nd class fares.

The average receipts per mile, per carriage and per fare, on the Guaranteed Railways during the first-half of 1877, were as follows:—

Railways.	Accommodation.		1st Class.		2nd Class.		Intermediate.		3rd Class.	
	Carriage.	Fare.	Carriage.	Fare.	Carriage.	Fare.	Carriage.	Fare.	Carriage.	Fare.
	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.
Madras	23-80	14-64	17-26	5-27	...	...	α59-99	2-80	...	...
South Indian	10-17	8-03	24-55	2-87	...	...	51-27	1-89	...	...
Great Indian Peninsula	24-06	15-36	34-36	5-62	...	...	α39-73	2-85	...	...
Bombay, Baroda and Central India	23-01	11-38	30-96	5-25	...	...	78-69	3-01	...	...
East Indian, Main Line	20-55	16-00	20-48	5-42	14-11	4-10	73-87	2-99	...	...
East Indian, Jubbulpore Branch	34-31	16-13	39-98	4-79	20-63	4-50	80-81	3-02	...	...
Eastern Bengal	16-25	9-98	14-65	5-09	53-34	3-68	102-83	2-98	...	...
Oudh and Rohilkhund	...	...	*20-00	9-12	...	...	†44-15	2-04	...	...
Punjab and Delhi	23-91	15-44	23-79	4-95	11-19	4-28	49-06	2-34	...	...
Sind	26-89	12-86	18-09	4-47	23-81	3-65	59-08	2-40	...	...

α Intermediate and lowest class shown together.

* Upper class.

† Lower class.

From these figures it would appear that generally—

1st class carriages could be reserved at 2 fares.

2nd " " " " 6 "

3rd " " " " 25 "

without diminishing the then average receipts of the Railway Companies; but the charges on different lines for reserved accommodation varied, and were in no case less than six fares for a first class carriage, four for a compartment in a second class carriage, and six for a compartment in intermediate and 3rd class carriage. These charges were, except in the case of the third class, needlessly high and practically prohibitory; and the Government of India desired that a re-consideration of the tariff might be made, and rates fixed at prices that would induce persons to pay for reserved accommodation.* Accordingly fares for reserved accommodation are quoted in the Coaching Tariff of each Railway.

Colour of passenger tickets.—In 1882 the Director-General of Railways ordered that with the view of ensuring uniformity on the Indian State Railways, the following colours should be adopted for passenger tickets:—

White for ...	...	...	...	1st Class.
Green for ...	...	...	...	2nd "
Crimson for ...	...	...	...	Inter. "
Yellow for ...	...	...	...	3rd "

No orders were laid down for the painting of carriages in the same colours but it was at that time a general desire that the colours of railway carriages might be the same as those of passenger tickets. It was an excellent idea, especially to help passengers in finding the correct carriage on trains, which often confused a passenger unaccustomed to railway travelling, when one in a moment of hurry tried to find a seat or had to return to it after getting out at an intermediate station, especially if he or she was unable to read the English marks on the carriages.

* P. W. D. No. 4493-4503 R. of 22nd October 1878.

SECTION 2.—Passenger Fares.

During the early period from 1853 to 1881, the passenger fares varied considerably on the different railways. There were frequent changes made owing to the experiments which had to be conducted. As the lines opened, the first fares introduced on each railway were in pies per adult passenger per mile as given below:—

Accommodation.		Year of first opening.	1st Class.	2nd Class.	3rd Class.	4th Class.
Railway.						
<i>Guaranteed Railways.—</i>						
G. I. P.		1853	24	10	3	...
East Indian		1854	24	9	3	...
Madras		1856	18	9	4	...
B. B. & C. I. Ry.		1860	12	5	2	...
Great Southern		1860	18	5	3	...
Scinde		1861	20	6	3	...
Panjab		1862	12	8	3	...
Eastern Bengal		1862	12	6	4	...
C. & S. E.		1862	12	6	4	...
Oudh & Rohilkhand.		1867	18	9	4½	3
Carnatic		1870	12	6	4	...
Nalhati		1872	27	13½	6½	3½
<i>State Railways.—</i>						
Khamgaon & Amraoti		1870	18	9	4	2½
Rajputana		1873	10·46	5·06	2·24	1·26
Holkar & Sindia Neemuch		1873	12·23	4·58	2·29	...
Wardha Valley		1873	18	9	4	2·5
Nizam's		1873	18	9	4	2·5
Tirhut		1873	13	4·3	2·1	...
Punjab Northern		1873	9·3	4·64	1·74	...
Indus Valley		1878	12·23	4·58	2·29	...
Northern Bengal		1878	18	9	2·50	...
Rangoon & Irrawadi						
Valley		1878	10·14	5·07	2·53	...
Dhond-Manmand		1878	17·81	8·91	2·97	...
Sindhia		1878	10·46	5·06	2·24	...
Muttra-Hathras		1879	13	5	2·50	...
Patna-Gaya		1879	18	9	3	...
Cawnpore-Farrukhabad		1881	15	6	2	...
Nagpur-Chhattisgarh		1881	18	8	2	...
Mysore		1881	12	6	3	...

The actual fares in force on the different railways from the year 1853 to 1881 varied in pies as shown below:—

	1st Class.	2nd Class.	3rd Class.	4th Class.
From 1853 to 1860 ...	18 to 24	6 to 12	2 to 4	...
From 1861 to 1870 ...	8 to 30	4 to 12	2 to 6	1.5 to 3
From 1871 to 1880 ...	9 to 18	2.9 to 9	1.74 to 4.5	1.26 to 3
1881 ...	9 to 18	4.3 to 9	2 to 4.5	2 to 3

First Class.—The first class fare of 8 pies per mile was in force on the Madras Railway in 1861–62 and on the South Indian Railway from 1875 to 1880. The Scinde Railway had a fare of 9 pies in 1872–73, and the Oudh & Rohilkhand Railway Upper class fare was of 9 pies from 1874–75 for more than seven years. Both the G. I. P. and the E. I. Railways had 24 pies in their first years, while the rate of 30 pies was on the Punjab Section in 1866–67 only. In other cases the fares were 12, 15 or 18 pies per mile. There was no first class on the C. & S. E. Railway from 1870 to 1877.

Second Class.—The rate of 12 pies was on the Punjab Section in 1866–67. The Madras Railway charged 4 pies in 1861–62, and the Punjab Northern State Railway 4.64, 3.94 and 2.90 pies per mile from 1874 to 1879. The Tirhut State Railway had 4.30 pies in 1875–76. The Madras Railway raised its rate from 4 to 5 pies in 1864–65 and kept it with an exception till 1872–73. The B. B. & C. I. Railway had the 5 pies rate in 1861–62. The S. I. Railway also charged 5 pies in 1861–62 and from 1869 to 1874, after which it reduced it to 3 pies per mile for about 4 years. The East Indian charged 6 pies in 1864–65 and 1866–67. The fares on the Rajputana State Railway from 1874 to 1880 varied from 4.42 to 5.24 pies per mile. In other cases the fares were 7.8 or 9 pies. The Second Class was abolished on the Oudh & Rohilkhand Railway from 1874 till the line was taken over by Government.

Third Class.—Upto 1860 there were only three classes of passengers on the Indian Railways. In 1861 the G. I. P. Railway added a fourth class. It was followed by the E. B. Railway in 1864-65, by the O. & R. in 1869-70, by the Madras Railway in 1870-71, by the S. P. & D. Railway in 1872-73, and by the State Railways in 1874. The fares for the 3rd class, where the fourth class was provided, varied from 2 to 4 pies per mile.

Intermediate Class.—The Intermediate Class styled as such at 4½ pies per mile was introduced for the first time in 1870 on the E. I. and E. B. Railways. In 1881 the Inter Class at 4·5 pies was provided on the S. P. & D., Sindia State and Northern Bengal State Railways, besides the two lines already mentioned.

On the Oudh & Rohilkhand Railway there were four classes from 1869 to 1873. From 1874 they were reduced to three, *viz* :—

Upper Class	...	...	9 pies per mile.
Lower Reserved	...	...	3 pies per mile.
Lower Class	...	...	2 pies per mile.

On the Madras Railway a scale of day and night fares was in force from 1870 to 1874 at the following rates :—

	Day.	Night.
1st Class ...	18 pies.	22 pies.
2nd Class ...	5 pies.	12 pies.
3rd Class ...	3 pies.	4 pies.
4th Class ...	2 pies.	<i>Nil.</i>

In 1866-67 an experiment was started on the G. I. P. Railway to run Coolie trains “corresponding with the trains for workmen on some of the English lines,” and a “Coolie” or 4th class fare of 2 pies per mile was adopted, while the same 2 pies fare was for 3rd class on the E. I. Railway and 3 pies on the E. B., C. & S. E. and G. S. of I. Railways.

In 1870-71 the lowest fares were two pies per mile on the Madras and Oudh & Rohilkhand Railways, 2½ pies on the G. I. P. and S. P. & D., and 3 pies on the E. I., B. B. & C I., E. B. and G. S. of I. Railways, and 4 pies on the Carnatic Railway.

The passenger fares on the Principal Railways in force in

1872-74 were as follows:—

Accommodation. Railway.	1st Class.	2nd Class.	Inter Class.	3rd Class.	4th Class.
	Pies.	Pies.	Pies.	Pies.	Pies.
E. I. Railway ...	18	9	4½	3	...
Eastern Bengal ...	12	6	4½	3	...
B. B. & C. I. Ry. ...	15	7	... {	4 mail, 3 ordinary	...
G. I. P. Ry. ...	18	9	...	4	2½
S. P. & D. Ry. ...	18	9	4½	3	...
Oudh & Rohilkhand	9 Upper	...	... {	2 Lower 3 Reserved	...

In 1878-79 the lowest fare was 1·80 pies per mile on the P. N. State Railway.

In 1879 the late Col. J. G. Medley, R. E., who was at the time Consulting Engineer for the Guaranteed Railways at Lahore, in a strong note, advocating substantial reductions in the lowest class of passenger fares with a view to developing traffic, wrote: "my opinion is very strong in favour of a very low scale of 3rd class passenger fares." . . "I think the acceptance of that principle lies at the root of financial success of the Indian lines, and that until it is acted upon, that success will always be partial and uncertain." He proposed a rate of one pie per mile, and gave the instance of the 3rd class fare between Lahore and Amritsar, 32 miles, which was six annas at that time. He thought it was low enough to drive Ekkas off the road, but it represented two or even three days' pay of the great bulk of the population. He asked "how often could an English labourer afford to spend two days' pay on a railway journey?" With these high fares large numbers walked on foot and saved money even after their feed.

The Government of India circulated that note to the Railway Administrations, many of whom generally admitted the soundness of the views, while others were reluctant to sacrifice any revenue by making reductions.

In 1879-80 the Government Director wrote.—

"One result of the various fares which have been tried is this, that the smallest reduction at once increases, and the smallest addition diminishes the number of travellers. The rate of payment, demanded from passengers should depend in the first instance, upon the cost of transport, and secondly upon the power of passengers to pay. The object should be to attract the largest numbers and yet leave a margin for profit between the cost of conveyance and the amount received. We see that on some lines on which the lowest fares are in force, this margin is greater than where the highest fare is charged."

He cited the instance of the Metropolitan lines in England where a fare of $\frac{1}{2}d. = 1\frac{1}{2}$ pie per mile was charged for workmen's trains which were said to be the most profitable that ran. Mr. Thomas Robertson in paras. 191-93 of his Report of 1903, made a comparison of the average fares in India with the average rates on the principal railways in England as under:—

	1st Class.	2nd Class.	3rd Class.
England	19.68	13.08	9.84 Pies.
India	12.75	5.49	2.31 "

He remarked that—

"The fares and rates charged in India, judged from the stand-point of the actual money payment made, are considerably lower than those charged in England; but for a comparison to be of any value, consideration must be paid to the circumstances of the two countries. Taking the cost of construction and working in England and comparing them with the cost of construction and working in India, and in every other respect if like is compared with like, I think it will be found that *the fares and rates in India should, broadly-speaking, be only about one-sixth of those charged in England.* Before therefore, the fares and rates in India, can be regarded, relatively as equal to those in England, the former would require to be lower than the rates now charged for passengers by about from 18 per cent. to 40 per cent."

The italics are ours. We agree with the above remark. In making a comparison of the Indian fares with those of the English Railways, regard must also be had to the buying power of money in the two countries.

On the Madras Railway a 2 pies rate was substituted on first July 1879 for one of 3 pies for all trains except the mail trains. During the six months which followed, the number of passengers in the 3rd class increased from 1,311,076 in the corresponding half of 1878 to 1,797,039. This large increase the Agent of the

Railway stated was obviously due to the introduction of the 2 pies fare. In their Report for the half-year ending 30th June 1882, the Directors of the Company wrote:—

“The reduction of the fares of the 3rd class from 3 to 2 pies per mile continues to be attended with marked success. Not only have the numbers been increased beyond all former precedents, amounting to 2,129,599, but with the exception of December 1877 and June 1878, the actual earnings from this class were greater than in any former half-year since the line was completed in 1873.”

On the O. & R. Railway the lowest class fare was altered in a contrary direction on 1st January 1880 from 2 to 2½ pies. During the first 21 weeks of 1880 the number of passengers decreased, compared with 1879, by upwards of 274,000 or by 22 per cent. and the receipts for the same period were less than 1879 by upwards of Rs. 50,000 or 7 per cent.

On the B. B. & C. I. Railway in 1877, the lowest fares were 4 pies by Mail and 3 pies by ordinary trains. From 1st July 1878, the latter was reduced to 2½ pies. The Mail train did the journey between Bombay and Ahmedabad in 14½ hours, while by ordinary trains a passenger took two days for the same journey with a compulsory halt for the night at Surat. Comparing 1879 with 1877, the 3rd class passengers and earnings by *Mail* trains fell off by 27 per cent; but those by the *Ordinary* trains increased as shown below:—

1877		1879		Difference.	
No.	Earnings	No.	Earnings	No.	Earnings
	£		£		£
Mail trains	440,634 58,350	322,285 42,870	—118,349	—15,480	
Ordinary trains.				=27%	=26.5%
	3,826,292 123,898	4,880,302 132,934	+1,054,010	+9,036	
			=27.5%	=7.3%	

On the transfer of the E. I. Railway in 1881 to Government, the Government of India against the wishes of the Company, decided to lower the third class fares from 3 to 2½ pies, a measure of which the Company soon after recognised the wisdom. The number of 3rd class passengers and receipts therefrom con-

siderably increased as a result of that reduction. The following figures of passengers before and after the reduction fully demonstrate the point:—

					Number of Passengers.
Second half of 1880	...	...	...	...	3,744,061
First " " 1881	...	...	...	...	4,193,465
Second " " 1881	...	...	...	...	3,969,308
First " " 1882	...	...	...	...	4,939,168
Second " " 1882	...	...	...	...	4,688,429
First " " 1883	...	...	...	...	5,943,736
Second " " 1883	...	...	...	...	5,255,688

The reduction was made from 1st January 1882 for stations above Naini, and from July 1882 for the whole of the line.* In 1881-82 the Government Director wrote:—

“ With these examples and with the general experience which has been gained with low fares on State lines, I cannot but think that before long the 2 pies rate will be acknowledged as the proper one for almost universal application to the lowest class of passengers on Indian lines.”

With their No. 1446 R. T., dated 12th December 1887, the Government of India issued the following schedule of maxima and minima Passenger Fares and rates for Coaching traffic and parcels:—

				Maximum. Pies per mile.	Minimum. Pies per mile.
<i>“ Passenger Fares—</i>					
1st class	...	...	...	18	12
2nd ”	...	...	...	9	6
Intermediate	...	...	...	4½	3
3rd class	...	...	...	3	1½ (¹)
<i>Luggage per maund</i>	...	...	...	2	1
† <i>Carriages—</i>					
Single carriages	...	...	...	42	30
Two or more carriages on one truck	...	...	...	54	42
† <i>Horses—</i> Single horse	...	...	...	24	18
<i>Dogs—Each per 50 miles or portion thereof, 96</i>					48

*Paras. 4320 and 4322 of Major Conway Gordon's evidence before the Select Committee of 1884.

(†) Altered to 1½ pies under G. of I. No. 380 R. T. of 15th May 1891.

† Subject to a minimum charge of Rs. 5.

Parcels—The rates passed at the Railway Traffic Conference of 1884, as under:—

		First 100 miles. Every additional		100 miles..	
		Annas.		Annas.	
† Not exceeding 5 seers or 1 cubic foot		3		1	
" " 10 " 2 cubic feet		6		3	
" " 20 " 4 "		10		5	
" " 30 " 6 "		13		6½	
" " 40 " 8 "		16		8	
For every additional 10 seers or 2					
cubic feet, or portion of 10 seers					
or 2 cubic feet		4		2	

Parcels exceeding 40 seers in weight or 8 cubic feet in measurement may be booked if accommodation will allow."

In March 1917 the maxima passenger fares were raised as under by the Railway Board:—

		From	To
		Pies per mile.	Pies per mile.
1st Class ... ..	...	18	24
2nd Class ... ..	...	9	12
Inter. Class ... ..	...	4½	6
3rd Class... ..	...	3	4

In 1890 Mr. Horace Bell, M.I.C.E., then Consulting Engineer to the Government of India for Railways, reopened the question as to whether the Indian Railways had generally reached the limit of fare at which the maximum net receipts could be derived from the third or lowest class of passengers. His note was full of facts and arguments. He advocated a fare of 1½ pies per mile coupled with a rate of 1 pie per mile for women and children, on all those railways which served districts having a population averaging over 150 to the square mile.

In 1894, the lowest passenger fares were 1.5 pies per mile

† Subject to a maximum charge of one rupee for a parcel not exceeding 5 seers, irrespective of distance.

on the East Coast State Railway, the Madras Railway, and the Kolar Gold Fields Railway; and 2 pies per mile on the Bengal-Nagpur, the Nizam's Guaranteed, the B. & N. W., the Rajputana Malwa, the S. M., and the S. I. Railways. The Deogarh Branch company charged six pies per mile for the lowest class.

In 1907 the B. B. & C. I. Railway reduced its lowest fares to the following figures:—

	Over Broad-Gauge. Pies per mile.	Over Metre-Gauge. Pies per mile.
For first 200 miles ...	2½	2
For additional distances...	1½	1½

From 1st June 1916, the N. W. Railway altered their fare from 2½ pies to 2½ pies per mile for first 100 miles and 2 pies per mile for additional distances.

Enhancement.—In the Administration Report of Railways in India, Part I, pages 23-24, for 1916-17, it was stated that the subjects of the reduction in train services and the increase of fares and withdrawal of concessions were discussed by the Railway Board with the Agents and Managers of principal railways at a meeting held at Delhi in December 1916, when in view of the practical impossibility of obtaining sufficient supplies of railway material from England on account of the war, it was decided to abolish certain mail and a large number of passenger trains, and to enhance the fares on fast trains to the maximum then existing, in order to discourage travelling and avoid undue overcrowding in the reduced train services. The total reductions in the train services amounted to over 22 per cent. of the passenger and mixed train mileage of the railways as compared with the corresponding period of 1915-16; and at a second meeting convened by the Railway Board towards the end of March 1917, it was decided that on all the principal Broad-Gauge Railways, the 3rd class fare should be advanced to the existing maximum, and on others where the ordinary fare had been only ⅓rds of the maximum, that it should be advanced by 25 per cent. It was at the same meeting decided to increase

the maxima fares for all classes as noted at page 419. Effect to the other decision was given on various dates between 1st March and 15th July 1917 on the different railways.

The following statement shows the fares which were in force before March 1917 and the enhanced fares then adopted on the principal railways:—

Railways.	Former rates in pies per mile.					Revised rates in pies per mile.				
	1st Class.	2nd Class.	Inter. Class.	3rd Class.		1st Class.	2nd Class.	Inter. Class.	3rd Class.	
				Mail.	Ordinary.				Mail.	Ordinary.
<i>State-worked.</i>										
1. N.-W. First 300 miles.	18	9	3½	} a	a	18	9	4½	3	3
Additional distances	12	6	3½							
2. Oudh & Rohilkhand ...	18	9	3	b	b	18	9	4½	3	3
3. Eastern Bengal ...	18	9	4	2½	2½	18	9	4½	3	3
<i>Company-worked.</i>										
4. E. I. First 300 miles	18	9	3½	} c	c	18	9	4½	3	3
Additional distances	12	6	3½							
5. G. I. P. First 300 miles.	18	9	4½	} d	d	18	9	4½	3½	3
Additional distances	12	6	4½							
6. M. & S. M.										
First 300 miles ...	18	9	4	} 2½	2	18	9	4½	3	2½
Additional distances ...	12	6	3							
7. B. B. & C. I., B.-G.										
First 300 miles ...	18	9	...	3	} e	18	9	...	3½	3
Additional distances	12	6	...	2						
8. B. B. & C. I., M. G.										
First 300 miles ...	18	9	3	3	} f	18	9	...	3	2½
Additional distances	12	6	2	2						
9. South Indian ...	12	6	...	1	1	(18) (12)	9 6	...	3	2½
10. Nizam's Guaranteed										
First 50 miles ...	} g	6	...	3	2½	} 18	9	...	3	2½
Additional distances		...	...	2½	2					
11. B. N. First 300 miles.	18	8	...	3	h	18	9	4½	3	3
Additional distances	12	6	...	...	...		
12. B. & N. W. Ry. ....	...	...	...	...	...	18	9	4½	2	2
13. Assam Bengal ....	...	...	...	...	...	18	9	4½	3	3
14. Burma Railway ...	...	...	...	...	...	18	9	...	3	3

	Pies.		Pies.
(a) First 100 miles ...	2½	(g) Broad-Gauge ...	18
Additional distances ...	2	Metre-Gauge ...	12
(b) First 75 miles ...	2½	(h) First 200 miles ...	2½ to 2½
76 to 150 " ...	2	Additional distances...	2
Over 150 " ...	1½		1st Cl. 2nd Cl.
(c) First 100 " ...	2½	(i) First 200 miles. 24	12
101 to 300 " ...	2	Additional distances 12	6
Over 300 " ...	1½	(j) Mail.	
Inter. Class abolished from		(k) Ordinary.	
Mail Express.			Mails. Ord.
(d) First 100 miles ...	2½	(l) First 50 miles	2½ 2
Additional distances	2	51 to 200 "	2 2
(e) First 200 miles ...	2½	Additional dis-	
Additional distances...	1½	tances	1½ 1½
(f) First 200 miles ...	2	(m) Varied from 3½ to 4½ pies per	
Additional distances ...	1½	mile on different parts of line,	

In reply to the debate which took place on this subject in the Legislative Council in March 1918, the Hon'ble Sir George Barnes on behalf of the Government, said that the enhancement of the fares was made owing to the difficulties *due to the war in Europe*. It was understood that the enhancements were temporary and would be withdrawn after the war. This has not been done. On the contrary the Inter. and 3rd class fares on many of the Indian Railways have been raised still higher to the figures shown below, from the dates marked opposite each railway:—

1. *Nizam's Guaranteed Railway* (From 1st April 1920)—
3rd Class by Mail trains ... 3½ pies per mile
" by Ordinary trains ... 3 " " "
2. *Bengal Nagpur Railway* (From 1st August 1920)—
Inter-Class by Mail for 1st 400 miles 5 pies per mile.
For any additional distances 4½ " " "
By Ordinary trains 4½ " " "
3. *B. B. & C. I. Ry. Metre-Gauge* (From 1st August 1920)—
3rd Class by Mail trains ... 3½ pies per mile.
" by Ordinary ... 3 " " "
4. *M. & S. M. Railway* (From 1st August 1920)—
Inter. Class by Mail ... 5 " " "
" Ordinary ... 4½ " " "
3rd Class by Mail ... 3½ " " "
" Ordinary ... 3 " " "

5. *Assam-Bengal Railway* (From 1st October 1920).—

Inter. Class for 1st 400 miles ... 5 pies per mile.

for additional distances... $4\frac{1}{2}$ " " "

3rd Class for 1st 100 miles ... 4 " " "

for additional distances ... $3\frac{1}{2}$ " " "6. *G. I. P. Railway* (From 1st January 1921).—

Inter. Class, upto 300 miles ... 6 pies per mile.

for additional distances	} ... $4\frac{1}{2}$ " " "
to be added to the fare	
for 300 miles.	

3rd Class by Mail and Express trains 4 pies per mile.

We are not certain that the above are complete lists of the enhancements made in 1917 and 1920, it is very difficult to get this information, as the Government have discontinued the Table of actual Rates and Fares which used to be published in Part II of the Administration Report up to 1899. That Table should be reintroduced, as the public have no means of finding complete information for all railways in a single publication.

1st and 2nd Classes.—There was no increase on the E. B. and O. & R. Railways. On the S. I. Railway there was an increase of 50 per cent. in Mail fares only, and on the N. G. S. Railway there was an all-round increase of 50 per cent. on its Metre-Gauge Section. Many of the other lines had in March 1917 a sliding scale of 18 pies and 9 pies per mile for 1st and 2nd class respectively, for distances upto 300 miles, with a lower charge of 12 pies and 6 pies per mile for additional distances over 300 miles. The enhanced fares were 18 and 9 pies per mile uniformly for all distances. The enhancement was for journeys extending beyond 300 miles and amounted to 15 per cent. on a through journey of 500 miles. The increases on the B. N. Railway for the first 200 miles were 33 and 50 per cent. respectively, for the two classes; but for longer distances the percentages were lower.

Intermediate Class.—The Intermediate Class fare formerly varied from 3 pies to $4\frac{1}{2}$ pies per mile on the different railways according to distance or otherwise. In 1917 it was raised uniformly to

4½ pies per mile, *irrespective of the distance travelled*, over all the principal railways, except the B. B. & C. I. Railway, the South Indian, and the Nizam's Guaranteed; the first of these abolished this class, while the other two companies did not provide this accommodation which is so well suited to the requirements of the middle class Indians. The E. I. Railway went a step further and abolished the Inter. class on their mail trains between Howrah and Kalka. This abolition raised the lowest fare by those trains between Delhi and Howrah by 184 per cent. A passenger, who could previously travel Inter. class by those trains at the sliding scale of 3½ pies for the first 300 miles and 3 pies for the additional distances, was compelled to buy a second class ticket at 9 pies per mile for the entire distance. In 1920 the G. I. P. raised its fare to 6 pies per mile for the first 300 miles, the A. B. Railway to 5 pies for the first 400 miles, and the B. N., M. & S. M., to 5 pies by their mail trains. The increases on the 1916 fares amounted to 50 per cent. on the O. & R. Railway; 28 to 36 per cent. for distances 300 to 500 miles on the N. W. Railway generally and by ordinary trains on the E. I. Railway; 12½ per cent. on the E. B. Railway; 33 per cent. on the G. I. P. Railway for distances upto 300 miles; 43 to 54 per cent. on the B. N. Railway, 25 to 33 per cent. on M. & S. M. Railway mails and 12½ to 25 per cent. on the ordinary trains for 300 to 500 miles.

Third Class.—The third class fares on the principal railways in India were formerly on sliding scales of 2 or 2½ pies per mile for the first distance of 75 to 200 miles, with lower charges of 1½ or 1½ pies per mile for additional distances. In 1917 they were raised to uniform rates of 2½, 3 or 3½ pies per mile for all distances, long or short. Again in 1920 the mail fares were raised from 3 to 3½ pies on the N. G., B. B. & C. I. Metre-Gauge, M. & S. M. Railways and to 4 pies on the G. I. P. Railway. The ordinary 3rd Class fare was at the same time raised from 2½ to 3 pies on the N. G., B. B. & C. I. Metre-Gauge, and M. & S. M. Railways and from 3 to 4 pies for first 100 miles and 3½ pies for additional

distances on the A. B. Railway. The largest increases on the railways generally were in the 3rd class. Take for instance the O. & R. Railway where the increases were—

20 per cent. for distances upto	...	...	75 miles.
33	"	"	150 "
60	"	"	300 "
74	"	"	500 "

The increases on the 1916 fares of the other railways for distances up to 500 miles worked out as under:—

20 to 43 per cent.	on the N. W. Railway.
16 to 37 per cent.	on the Nizam's Mail trains.
20 to 46	" " " Ordinary trains.
17 to 35	" " B.B. & C.I. Mail trains.
20 to 46	" " " B. G. Ordinary trains.
50 to 76	" " " M. G. " "
40	" " " M. & S. M. Mail trains.
50	" " " Ordinary trains.

Return Tickets.—

The reductions of $\frac{1}{2}$ or $\frac{2}{3}$ ds of a fare which were formerly allowed on return tickets, were totally withdrawn in 1917 and the fares for such tickets were calculated at double the *increased* rates for single tickets. The increases on double journeys were therefore still higher than those on single tickets. The various concessions allowed for passenger fares generally were also withdrawn in 1917.

Considerable as these enhancements were, they fell heavily upon the 3rd and Inter. Class passengers who form the bulk of the passenger traffic.

The main object which the Government had in view, *viz*: to discourage passengers from undertaking journeys was to be sufficiently met by the curtailment of the number of trains which had been simultaneously carried out with the enhancement of the fares. This double action on the part of the railway administrations not only compelled the people to pay the higher fares but subjected them also to serious discomforts in travelling caused by the curtailment of the already inadequate train

service. Complaints of overcrowding have always been loud and the seriousness has risen to a higher pitch since the war period.

The enhancement of the fares is hardly justifiable. It virtually amounts to an extra taxation. As the State Railways are owned by the people who have defrayed all charges on account thereof, the people are entitled to a reasonable service from the railways at no more than the cost of working the railways including the interest on capital outlay. This principle is generally recognised wherever State railways have been provided and ought to be recognised in India. As an instance of this principle, we would cite the practice of the Belgian State Railways from page 179 of "American Railway Problems" by Carl S. Vrooman, published by the Oxford University Press, in 1910, where he writes :—

"In the original law of May 1st 1834 authorising the construction of first Belgian Railway by the Government, all idea of running them for a profit was completely eliminated. According to Article V of that law there were three and only three objects to which income of the roads was to be devoted : First, the payment of interest on the capital invested ; second, the liquidation of the bonded indebtedness ; and thirdly, the supplying of operating expenses and of funds for the general maintenance of the roads. Consequently the policy of the Belgian Roads has always been to keep rates down so low and the service upto so high a standard that in the long run the roads would come out as nearly even as possible."

Major Conway Gordon, R. E., late Director-General of Indian State Railways, who gave evidence on behalf of the Government of India, before the Select Committee of the House of Commons in 1884, emphasised the fact that any profits made in the working of State Railways virtually amount to a transit duty or extra taxation. In para. 4299 of the evidence recorded by that Committee, he expressly said—

"that every rupee taken out of the country [by an English Company in excess of the normal rate of interest on the State debt constitutes practically a direct tax on transit, which must, of course, have its effect on checking the export and import trade, and on the general development of the country;"

According to this principle the charges levied from passengers should safely cover the working expenses together with a share of the interest on the capital outlay. This has been laid down by the Government of India also, see para 435 *infra*. The earnings from passenger traffic on Indian Railways were 2,098.57 lakhs of rupees in 1915-16 and Rs. 2,308.19 lakhs in 1916-17 and the percentage of net earnings on capital outlay on open lines was 5.99 and 6.96 respectively. Considering that the normal rate of interest on Indian loans before the last European war was only 3½ or 4 per cent., the average return of 6.96 per cent. for all the Railways in India was sufficiently high and justified no enhancement but a reduction in the passenger fares.

From the early days of the Indian Railways, it has been the deliberate policy of the Government of India to cheapen the railway fares, especially for the lowest class. In the history of the Indian Railways this was the first time that a reversion of that sound policy was allowed. It is a matter of regret that it was the Railway Board, who without consulting the Legislature or the Indian public, authorized this reverse step, ignoring the previous policy of successive Governments. Its results are evident from the following figures of Inter and 3rd class traffic on the whole of the Indian Railways:—

Year.	Inter Class.		Third Class.	
	No. in hundreds.	Earnings in thousands of rupees.	No. in hundreds.	Earnings in thousands of rupees.
1914-15	12,617.7	1,03.31	403,558.8	17,62.96
1915-16	13,648.1	1,12.82	418,254.0	18,04.85
1916-17	14,348.8	1,22.41	431,456.2	19,61.59
1917-18	7,719.4	3,15.73	381,016.7	21,44.51
1918-19	8,721.6	1,42.88	404,387.6	24,42.81
1919-20	10,200.6	1,69.68	460,305.8	27,68.94

Notwithstanding the increase in the open length of the railways from 35,284 miles in 1914-15 to 36,616 miles in 1918-19, the number of passengers and earnings therefrom, which were steadily rising year after year, fell considerably in the first

two years, in which the enhanced fares were in force. A recovery, however, took place in the 3rd class in the third year (1919-20).

In appendix 10 we have given the average cost of hauling a passenger one mile on the principal railways during the year 1915-16, which was a normal year, unaffected by the suspension of renewals. It will be observed that the cost on the three gauges varied as follows:—

		First half-year.	Second half-year.
		Pies per mile.	Pies per mile.
5'—6" Gauge	... ..	0·78 to 1·99	0·72 to 1·86
Metre-Gauge	... ..	0·78 to 1·82	0·69 to 1·93
2'—6" Gauge	... ..	2·23 to 6·55	2·39 to 3·35

Appendix 11 shows the average earnings, the average costs and the average profits per coaching vehicle on the principal railways in India. The analyses are given for each railway separately. They show that even with lower fares which were in force in 1915-16, the 3rd or Inter Class and the 4th or lowest class paid handsome profits to the railways. Take for instance the 4th class on the E. I. Railway 5'—6" Gauge, and on the Rajputana Malwa Railway 3'—3½" Gauge:—

		5'—6" Gauge.	3'—3½" gauge.
		Pies.	Pies.
Average earnings per coach			
per mile	... ..	53·63	35·87
Average cost of hauling	... ..	13·07	15·67
Average profits per mile	... ..	40·56	20·20

These figures show that the lowest class of passengers gave profits of 40·56 pies per carriage per mile (310 per cent. on cost) on the E. I. Railway and a profit of 20·20 pies per carriage per mile (128 per cent.) on the metre-gauge railway during the first half of 1915-16; whilst the 1st and 2nd classes were run at a loss of 0·49 and 1·48 pies per carriage per mile respectively on the E. I. Railway; and at a loss of 10·71 and 2·27 pies per mile on the B. B. & C. I. Railway, during the same half-year. The

Railway Administrations should not make the lowest class passengers pay for the haulage of 1st and 2nd class carriages. Whether the fares for the lower classes be reduced, or not the accommodation for these classes should certainly be enlarged and greatly improved. The enhancements in the Inter and 3rd Class fares which have been lately made, are however, not justifiable and should be withdrawn.

The 4th or the lowest class is the most paying on all the railways in India. Not only does it cover the losses incurred by the running of the 1st and 2nd classes, but it brings in net profits on the whole of the passenger traffic. The lowest cost of carrying a passenger one mile was 0.64 pie in 1912 and 0.69 pie in 1915-16 on the B. & N. W. Railway.

The statistical *costs* of working are generally excessive, as they include the standing charges as well as the actual or varying charges.

Standing charges consist of the interest on capital outlay, salaries of the permanent staff that must be employed whether the line runs more or less number of trains or does more or less work; whereas the variable charges rise or fall with the volume of work actually done. In quoting special rates a manager will not always work upon the statistical averages, but will work out for himself the actual costs of running an extra train, taking into account—

- (a) Cost of fuel, water and consumable stores,
- (b) Wages of the Running staff,
- (c) A small percentage for wear and tear of road and Rolling Stock.

The total of *a* to *c* divided by the ton-mileage involved will give the cost per ton-mile; or the same total, divided by the number of passengers carried, will give the cost per passenger. These are practically the charges actually incurred by accepting additional traffic; while the standing charges are constant, whether any additional traffic is carried or not. This applies both to coaching and goods traffic.

In Japan the average earnings per passenger per mile during the year ending 31st March 1918 were as under.—

	Yen.	Pies.
1st Class	·0249	equal to 7·32
2nd Class	·0173	„ 5·08
3rd Class	·0128	„ 3·76

An Yen is equal to 2s. 0·582d. Here is an excellent example for India to follow. Indian railways run first and second class carriages generally at a loss. The reason is not far to seek. It is simply because the Indian fares for these classes are too high, beyond the means of the majority of the middle class Indians. The result is that both these classes are run almost empty chiefly for the use of higher officials and merchant-princes. If the fares be reduced to the level of Japan if not to that of Great Britain as computed by the Special Commissioner for India in 1903 (See page 416), all the classes of carriages would run fully loaded and convert the losses into profits.

This demonstrates the need for a general reduction of passenger fares.

The passenger train service in Japan is quite as liberal as in Europe, there being more than a dozen trains each way on Main lines.

The following statistics of Coaching traffic on the Japanese State Railways for the year ending 31st March 1918 will be found interesting in this connection:—

1. Mileage worked...	...	5,931
2. Average number of trains per day per mile	...	16·1
3. Average number of vehicles per train	...	12·6
4. Average number of passengers per day	...	671,875
5. Average mileage of journey per passenger	...	22·5 miles.
6. Average number of passengers per train	...	159
7. Average Coaching passengers per vehicle	...	12·7
8. Average Coaching receipts per vehicle mile	0·195 yen.	
	=57·33 pies.	

The general results of working of the Japanese State Railways for the same year were as under :—

	Yen.
Gross Receipts	183,525,143
Working Expenses	84,370,026
Net Receipts	99,155,117
Percentage of Expenses to Receipts ...	46
Receipts per train-mile	2.63
Working Expenses per train mile ...	1.21
Profit per train-mile	1.42
Capital	1,189,913,734
Percentage of profit on Capital	8.3

Villa Tickets.—The following recommendation by Mr. Thomas Robertson, C.V.O., Special Commissioner for Indian Railways, 1903, deserves special consideration, especially in cases where new settlements take place along the lines of railway :—

“199. *Villa Tickets.*—To encourage the erection of substantial Villas or residential houses along the lines of railway in the vicinity of large towns or business centres, and to induce business men to live in the country instead of staying in town, a free ticket covering the distance from one place to the other within a radius of say 20 miles, might be issued to the occupier for a series of years (10 is the usual period), in consideration of the traffic which may be expected from his family and visitors travelling to and fro. This would create a new and permanent source of revenue, and wherever the arrangement has been adopted, it has proved satisfactory to the Railway Companies.”

Season Tickets.—Monthly season tickets are generally issued at 40 single journey fares, and quarterly season tickets at 3 times the monthly charge.

In Bombay the Suburban traffic has been very largely developed and has enabled a large number of people carrying on business in the city to live in the Suburbs. The charges for

monthly season tickets between Colaba and Virar, a distance of 39 miles, for 1st, 2nd and 3rd class passengers were calculated at 12, 6 and $2\frac{1}{2}$ pies per mile respectively and worked out as under:—

(1) For the first mile, 40 single fares *minus* $2\frac{1}{2}$ per cent. on the total;

(2) For additional distances, the charges were taken for each $\frac{1}{4}$ mile, adding 10 fares to the net charge for the last length and deducting $2\frac{1}{2}$ per cent. of the total for each progression as shown in the following table.

Miles.		1st Class.	2nd Class.	3rd Class.
		Rs. a. p.	Rs. a. p.	Rs. a. p.
1	40 fares	2 8 0	1 4 0	0 8 4
	Less $2\frac{1}{2}\%$	0 1 0	0 0 6	0 0 $2\frac{1}{2}$
	Net Charge	2 7 0	1 3 6	0 8 $1\frac{1}{2}$
$1\frac{1}{4}$	Add 10 fares... ..	0 10 0	0 5 0	0 2 1
		3 1 0	1 8 6	0 10 $2\frac{1}{2}$
	Less $2\frac{1}{2}\%$	0 1 3	0 0 7	0 0 3
	Net Charge	2 15 9	1 7 11	0 9 $11\frac{1}{2}$
$1\frac{1}{2}$	Add 10 fares... ..	0 10 0	0 5 0	0 2 1
		3 9 9	1 12 11	0 12 $\frac{1}{2}$
	Less $2\frac{1}{2}\%$	0 1 5	0 0 9	0 1 $\frac{1}{2}$
	Net Charge	3 8 4	1 12 2	0 11 0
	And so on ... ..	...	...	...

Quarterly season tickets were charged at $2\frac{1}{2}$ times the fare for a monthly ticket, and half-yearlies, at double the charge for the quarterly tickets less 5 per cent.

SECTION 3.—Goods rates.

From 1853 to 1860 the goods rates on the three railways are shown at page 399. From 1861 to 1870 the rates varied as follows:—

First Class Goods.—From 8 to 12 pies per ton per mile, except 25 pies on the Punjab Section in 1865-66 and 1866-67, and 17 pies on the South Indian Railway between 1866 and 1870.

Second Class.—From 10 to 14 pies, except—
 24 pies on the E. I. Ry. in 1866-67.
 24 " " S. I. Ry. from 1866-67
 to 1869-70,
 18 " " G.I.P. Ry. in 1865-67,
 and on S. I. Ry. in 1870-71,

Third Class.—From 12 to 18 pies, except—
 28 pies on S. I. Ry. in 1866-70,
 26 " " Scinde Ry. in 1864-66,
 24 " " G.I.P. Ry. in 1865-67,

Fourth Class.—From 20 to 28 pies, except—
 15 pies on G.I.P. Ry. in 1869-70,
 36 " " " " in 1865-66,
 34 $\frac{2}{3}$ " " " " in 1866-67,
 48 " " E. I. Ry. in 1866-67,
 and on S. I. Ry. from 1866-70.

Fifth Class.—From 24 to 56 pies.

A sixth class was in force in 1869-70 on the G. I. P. at 56 pies, on the Madras Railway at 48 pies, on the B. B. & C. I. at 40 pies per ton per mile. In the same year special rates of 6 and 7 pies were charged by E. B., E. I. and O. & R. Railways.

From 1871 to 1880 the goods rates varied as follows:—

1st Class from 6-8 to 12 pies, the lowest on the O. & R. in 1878-79, and the highest on the Madras and S. I. Rys. The State Railways charged 9 to 15 pies.

2nd Class from 12 pies on the E. B. Ry. in 1872-73 to 14·8 pies on the S.P.&D. Ry. in 1874-75. The State Railways charged 13·6 to 23 pies.

3rd Class from 13·6 to 27 pies on Guaranteed Railways and from 18 to 29·78 pies on State Railways.

4th Class from 22 $\frac{2}{3}$ rds to 34 pies on Guaranteed Railways and 22·67 to 27 pies on State Railways.

5th Class from 24 to 54 pies on Guaranteed Railways and from 27 to 33 pies on State Railways.

The State Railways during this period were in their infancy and of short lengths. At the start they quoted rates per maund per station irrespective of the distance as given at page 408.

On most of the Guaranteed Railways there were special low rates for certain articles from 1872-73. They varied from 4 pies to 10·28 pies per ton-mile; those on the State Railways varied from 3 pies to 3·61 pies per ton per mile.

Till the end of the year 1880, there was no competition between the Indian Railways themselves. From the year 1881, on the through-opening of the Rajputana State Railway, a direct communication was established between Delhi or Agra and Bombay, and competition was commenced between the B. B. & C. I. and the Rajputana State Railway on one side, and the G. I. P. and the E. I. Railways on the other side, for traffic between Bombay and Upper India in one case, and for the traffic for the ports of Bombay and Calcutta from Delhi and Agra centres in the other case.

The matter was referred to the Government of India and in September 1881 they replied, dealing with the three points which were brought out prominently, *viz* :—

- (1) Proposed competition by assimilation of rates between the two existing routes from Delhi and Agra to Bombay;
- (2) Proposed pooling arrangement for the division of freights of what was to be considered competitive traffic;
- (3) Equalization of rates between Delhi and Howrah and between Delhi and Bombay.

With regard to the first point the claim of the G. I. P. Railway to share in this traffic could not be recognised, as the distance from Delhi to Bombay is 889 miles *via* Ahmedabad and 1230 miles *via* Jubbulpur and Allahabad. The idea of assimilating the rates by the two routes was out of the question, since the Government of India was not prepared to sanction any reduction of the E. I. Railway share of such charges.

The Government of India did not accept the proposed arrangement for pooling the through traffic from or *via* Delhi and Agra to Bombay, as such an arrangement could only be equitably carried out on the basis of equal or nearly equal mileage.

On the third point, the Government of India ruled that the principle of equalization of rates from Delhi and Agra to the ports of Calcutta and Bombay must form the basis of consideration of all changes in the through rates for all traffic between these several points.

The Government of India expressed a general opinion that—

"For the general welfare of the country it is immaterial whether its surplus produce finds an outlet *via* Calcutta, Bombay, Karachi, or other port, provided that the course of trade is unfettered by artificial obstacles. The lines of railway which the State has been instrumental in providing have been constructed for the purpose of carrying goods as well as passengers, *at the lowest rates consistent with yielding a fair and reasonable return on the capital laid out.*"*

The italics are ours. This is a very important principle and should be observed in fixing the future Rates and Fares.

The Government of India recognised the merits of competition, but the disastrous policy of reckless competition, indulged in by many of the English and American railways, had taught the world a lesson which could not be ignored. In his Despatch No. 132 Railway dated 19th October 1882, the Secretary of State expressed the opinion that:—

"The rates and fares on Indian Railways should be dealt with as nearly as possible as they would be by independent companies, i.e., the managers

*No. 1129 R. T. of 26th September 1881.

of railways should be left to fix their own rates and fares, that the interest of railways and trade generally would be better served by accepting the legitimate consequences of competition, and that the interposition of Government would be justified only in cases where Companies under the security of a guarantee, might fix rates below what would cover the cost of transport with a margin of profit."

These principles were unservedly accepted by the Government of India.

While the competitive rates between Delhi and Bombay were under discussion, a controversy arose between the B. B. & C. I. Company and the R. M. State Railway as to the division of the through rates between the two railways. The Secretary of State decided that—

"The principle of mileage division under the Clearing House arrangements may fairly be applied to Indian lines, whatever their original cost of construction or their present cost of working may be."

This is mostly sound, as the profits on railway working are in no way dependent on the high or low cost of constructing the lines, or the standing charges, but are solely dependent on the daily relation between the actual working expenses and the receipts.* See page 429 *Supra*.

The principle of dividing the through charges for the carriage of goods between Bombay and Cawnpore *via* Itarsi between the G. I. P. and the I. M. Railway Companies, on an equal mileage basis was also established in August 1889. †

In March 1883 the Government of India enunciated the following general principles on which Rates and Fares should be fixed:—

- (1) That the management should principally aim at attracting the maximum quantity of traffic the line could carry at reasonably low rates;
- (2) That all rates though capable of classification into groups, should be considered as 'Special' and be fixed with due regard to (a) what the article would bear, (b) the quantity obtainable;

* Page 10 of "Ways and Works in India 1894.

† P. W. D. No. 406 of 10th August 1889.

(3) That the rates might vary between limits represented by—

(a) The cost of carriage,

(b) The tax which the trade will bear;

(4) That the whole circumstances of the traffic as regards empty running, intermittent nature of traffic and the effect of competition by other routes, should be considered;

(5) That in the case of competition, the principle of rate calculation should be materially altered. While such factors as capital cost, gradients, cost of fuel and carrying power should be duly taken into account, the rates must ultimately be governed by the necessity of attracting traffic and not by any arbitrary standard of it. *

In 1885 the B. B. & C. I. Railway secured the working lease for the R. M. Railway system. With the entire command over the Rajputana route, the B. B. & C. I. Railway met the competition with other lines more easily than before 1885.

In 1887 on completion of the Sutlej Bridge and the linking up of the N. W. Railway with the metre-gauge system of the B. B. & C. I. Railway at Ferozepore, a controversy cropped up between the managements of the two railways, with regard to the through rates for grain and seeds to Bombay and Karachi from the B. B. & C. I. Railway stations Bhattu-Ferozepore, and from the N. W. Railway stations about Saharanpur, which were about equidistant between the two ports, the N. W. Railway maintaining equal mileage division of the through rates between the two Administrations, the one owning the shorter lead to take 6 pies per maund before the mileage division; while the B. B. & C. I. Railway held that each railway should quote its own rates to the junction.

The Government of India in their No. 1436 R. T. of 9th December 1887 decided that—

“In the opinion of His Excellency the Governor-General in Council, the through traffic between these two (the B. B. & C. I. and N.-W.) Railways should be worked as if the lines belonged to a single administration, the receipts, after deduction of any terminals, being divided according to mileage.”

The rulings thus far laid down show that the Government exercised due control over Rates and Fares, as prescribed in the contracts of the Agency Companies. But three days later the Government of India issued their Resolution No. 1446 R. T., dated 12th December 1887, wherein it was stated that “the time appeared opportune for promulgating” “certain general rules, subject to which the Managers of railways might be left free to fix such rates and fares as seemed most advantageous for their respective lines.” His Excellency the Governor-General in Council conceived that these rules should take the form of “certain general principles based upon the best recognised practice of the English and American railways.” Some of the most important of these principles seemed to His Excellency in Council to be as follows:—

I. That to protect the public and to prevent unreasonable charges on the part of the railway administrations, it is necessary for Government to impose restrictions as regards the maximum fares to be levied for the carriage of all classes of passengers, and the maximum rates for all descriptions of goods.

II. That the charges made to the public are admissible of division into two heads—(a) mileage rates and fares which necessarily vary to some extent with the distance the passengers and goods are carried; and (b) terminals, this latter being a fixed charge for services incidental to the business of a carrier.

III. That when once maxima and minima rates and fares have been fixed, any further interference on the part of Government in the matter of rates and fares is only a restraint of trade. The Railway Administrations, who know their own interests best, should be allowed to alter their rates with the prescribed maxima and minima to suit the varying conditions, under which commercial business is everywhere carried on. In granting this

freedom, however, it is assumed that the English Clearing House principles that in the case of two competitive routes between two stations the company owning the shortest route fixes the rates, is accepted.

IV—That, although in the interests of the public, the Government should abstain from direct interference in the matter of rates and fares, yet there are certain ruling principles which Government as the guardian of the public interests, must see are complied with by Railway Administrations. There should be no undue preference; in other words Railway administrations ought not to be permitted to make preferential bargains with particular persons or companies, such as granting them scales of charges more or less favourable than those granted to the public generally. Again in cases where the traffic offering is sufficient to justify this arrangement, Railway Administrations must give reasonable facilities for public traffic between any two railway stations, each Railway Administration being contented to receive for its share of the through rate less than its ordinary local rate.

The justice of this is evident when it is considered that all goods traffic is carried for long distances at lower rates than for short distances, so that if each Railway Administration were to charge its full local rate over its own comparatively short length of line the aggregate would be so great as to restrict the traffic. The principles enunciated by Sir B. Leslie, Agent of the E. I. Railway, in his No. 633 G. dated 25th August 1880, for working through traffic, are all that could be required:—

‘The various railway systems should, as far as possible, serve the country as if they were under one management and the dealer in country produce should not be hampered in his operations by the necessity to base his calculations on as many different scales of rates as there may be railways between the starting point and the destination. This can only be attained by adopting an uniform scale of rates for special or lower class goods which form the bulk of the country-produce, and where there are alternative routes, by sending goods according to sender’s option. The adoption of an uniform scale of rates for special class goods for the whole of the districts served by the E. I. Ry. and the O. & R. Ry. will in my opinion contribute largely to develop traffic. It will be, in my opinion, to the material advantage of the Railways and interests of the public to adopt an uniform gradation scale of rates for special class goods both for through and local traffic, on both Railways, the earnings from through traffic to be divided in the ratio of the mileage.’

These rights were secured to the public in England by the Railway and Canal Traffic Acts of 1854 and 1873. Care will be taken to secure the same rights to the public in India in the new Indian Railway Act now under consideration; but in the meantime His Excellency in Council relies on all Railway Administrations, in the interests of the public, giving effect to the above principle IV as if it already had the force of law."

The question whether the charging of a lower or an equal rate for a longer than for a shorter distance does or does not constitute 'undue preference' appears to be at present unsettled in England, although the weight of the legal authority is very much against the practice, and it seems to be at least settled that the charging by a railway company of a lower or even an equal rate for a longer than for a shorter distance *does* constitute *prima facie* evidence of undue preference. The Governor-General in Council is disposed to instruct the Managers of all State Railways to accept this view of the matter until the Courts of Law in India give a decision on the legality or otherwise of charging a lower or an equal rate for a longer distance, than for a shorter distance and the Consulting Engineers should use their influence, in the interests of the public, to prevent any undue preference being allowed to exist on Guaranteed lines.

Resolution:—His Excellency the Governor-General in Council is accordingly pleased to order as follows:—

- (a) That the schedule of maxima and minima rates and fares forming Appendix A to this Resolution shall be adopted on all railways ...so far as this schedule is not inconsistent with any contracts or agreements previously entered into; and that it shall not be departed from without cause being shown.
- (b) That in order that the public may have complete information as to the the maxima rates and fares which every railway is authorized to charge, the maxima and minima rates and fares fixed for each railway shall be published in their Goods and Coaching Tariffs under the signature of a Consulting Engineer if a private Company, and of the Secretary to Government in the case of a State line.
- (c) That unless sufficient reasons can be brought forward against the adoption of this course, the General Goods Classification now in force on the E. I. Railway shall be accepted for all railways worked directly by the State and by all other Railway administrations with the same proviso as to interference with existing contracts as under (a) above.

- (d) That there shall be no undue preference, either as between two Railway Companies or between a Railway Company and particular person or class of individuals, by making preferential bargains or by granting to one particular company or person more favourable conditions for the carriage of goods than to the rest of the public at large.
- (e) That the Director-General of Railways be instructed to place himself in communication with the several Railway Companies with a view to establishing a standing committee of Railway Managers."

As regards undue preference according to the English and American laws, it seemed undoubted that to charge a higher or an equal rate for a shorter than for a longer distance was *prima facie* evidence of undue preference. Section 4 of the United States Act to Regulate Commerce seemed to be as equitable a provision as the circumstances of the case admitted of. It ran as follows :—

"That it shall be unlawful for any common carrier, subject to the provisions of the Act, to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance, but this shall not be constructed as authorising any common carrier within the terms of this Act to charge and receive as great compensation for a shorter as for a longer distance. Provided however, that upon application to the Commission appointed under the provisions of this Act, such common carrier may, in special cases after investigation by the Commission, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property, and the Commission may from time to time prescribe the extent to which such designated common carrier may be relieved from the operation of this Section of this Act."

Section 43 of the Indian Railways Act of 1890 lays down :—

"(1) Whenever it is shown that a railway administration charges one trader or class of traders or the traders in any local area, lower rate, for the same or similar services than it charges to other traders or classes of traders or to the traders in another local area, the burden of proving that such lower charge does not amount to an undue preference shall lie on the railway administration.

"(2) In deciding whether a lower charge does not amount to an undue preference, the Commissioners, may so far as they think reasonable, in addition to any other considerations affecting the case, take into consideration whether such lower charge is necessary for the purpose of securing, in the interests of the public, the traffic in respect of which it is made."

Lower Rates for Longer Distances.—According to the last clause of para. 2 of Government of India, P. W. D., No. 1446 R. T. dated 12th December 1887, the quotation of a lower or even an equal rate for a longer than for a shorter distance *does* constitute *prima facie* evidence of undue preference. Such rates do exist on Indian Railways but the Railway Board has not had them altered.

As regards point (c) at page 440, of the general rules laid down by the Government of India in their Resolution No. 1446 R. T. of 1887, the Railway Conference of 1888 passed the following resolution :—

"Resolution 52.—That the Committee is of opinion that a uniform classification and uniform conditions are very desirable. The Committee is not prepared however, to deal with the question at the Conference, but considers that each railway should endeavour to make its own classification and conditions uniform with others as far as may be practicable."

Accordingly the Government of India modified their former Resolution and ruled as follows :*—

(a) That in local booking of goods, every railway administration shall be free to fix its own rates for all staples, subject to the maximum rate and the minimum rate of one-tenth pie prescribed by Government.

(b) That the uniformity of the division of goods for through-booking into five and special classes be secured throughout India.

(c) That in all cases in which the East Indian Railway and G. I. P. Railway have come to an agreement as to the inclusion into one of the five classes of any articles, the State Railways and those Railways over which the Government has reserved authority with regard to the regulation of rates, shall accept same classification, provided that the receipts from such articles are not of importance as a source of revenue to the Railway concerned.

* Government of India No. 1101 R. T. of 17th October 1888.

(d) That in the event of the receipts of any such article being of importance as a source of revenue, the Governor-General in Council will be prepared to consider on application from the railway administration interested, for the inclusion of the article into different class or its being carried at a differential (or sliding scale) rate.

(e) That where an article is carried on the G. I. P. and E. I. Railways at *Special Rates*, or when an article is not included on both these railways in the same class, every railway will be free to classify the article in through-booking from time to time as thought desirable. But in such cases where the receipts from such articles are unimportant, the classification adopted by the E. I. Railway should be followed by the State Railways and the other railways indicated in Clause (c).

(f) So long as an article is under clause (c), (d) or (e) included in any of the five classes, it will on the State Railways and the other Railways indicated in clause (c), in respect of through-booking, be carried at the rates per maund per mile prescribed in the schedule of maxima and minima rates.

(g) It will be convenient, whenever the following special (not differential) rates are used on State Railways, that the following nomenclature should be adopted in order to distinguish them:—

Schedule A	$\frac{1}{4}$	pie	per	maund	per	mile.
" B	$\frac{1}{8}$	"	"	"	"	"
" C	$\frac{1}{8}$	"	"	"	"	"
" D	$\frac{1}{7}$	"	"	"	"	"
" E	$\frac{1}{8}$	"	"	"	"	"
" F	$\frac{1}{9}$	"	"	"	"	"
" G	$\frac{1}{10}$	"	"	"	"	"

In giving these enlarged powers in regard to rates, His Excellency the Governor-General in Council trusts that Railway Administrations will realize the necessity of acting on the general principles which are accepted by the Legislature in England, and which the Railway Commissioners in that country are empowered to enforce; and will recognize that in through-booking the various Railway Administrations should serve the country as though they were under one management; and that when there are two alternative routes, the shorter should fix the minimum rate for both routes."

As the companies have not fully complied with these conditions, the Government will be justified in withdrawing the

enlarged powers given under clause III of Reso. No. 1446-R. T. of 1887, and enforcing whatever rates and fares the Government may consider necessary in the interests of the country.

The following is an extract from the Appendix A mentioned in clause (a) at page 440 :—

Goods Rates.			Maximum. Pie per Md. per mile.	Minimum. Pie per Md. per mile.
5th Class	...	...	1	1
4th Class	...	...	$\frac{5}{8}$	$\frac{5}{8}$
3rd Class	...	...	$\frac{3}{4}$	$\frac{3}{4}$
2nd Class	...	...	$\frac{1}{2}$	$\frac{1}{2}$
1st Class	...	...	$\frac{1}{3}$	$\frac{1}{3}$
Coal, edible grain and other low-priced staples carried at special rates	...	...	$\frac{1}{3}$	$\frac{1}{10}$

In May 1891, the Government of India considered that it was desirable—

- (a) that a *separate* maximum and a *separate* minimum rate should be fixed for each of the five different classes of goods, so that Railway Administrations may have the power to vary their charges between the prescribed limits without reference to Government, and
- (b) that all goods should be arranged in classes and that the transfer of goods from one class to another should not be made without the prior sanction of Government.

A revised schedule of maxima and minima Rates and Fares was issued, in which the minimum for each of the five classes of goods was fixed at $\frac{1}{3}$ pie per maund per mile, while the minimum for the special goods was retained at $\frac{1}{10}$ pie per maund per mile, and the commodities coming under the special class subject to a Maximum rate of $\frac{1}{3}$ rd pie per maund per mile, and a Minimum rate of $\frac{1}{10}$ pie per maund per mile were specified as under :—

Article.	Article.	Article.
Ballast and Gravel.	Bricks, common.	Coal or coal dust.
Barley.	Chunam or Lime in truck loads or loose.	Coke.
Black Salt.	Chuman or Lime in bags or casks.	Firewood.
Bones for manure.		Flag-stones.
		Fuel, patent.

Article.	Article.	Article.
Grain and seeds.	Paddy.	Slates, roofing or
Gram.	Potatoes.	flooring, rough.
Grass or Hay, pressed.	Pulse.	Soorkhie.
Indian-Corn.	Resin.	Stone, common, of all
Kunkur.	Rhea plant, stalks	sorts, dressed and
Lime (see Chunam)	or fibre, screwed	undressed.
Limestone.	to 8 feet per bale	Stone, wrought or
Malt.	of 300 lbs.	damageable.
Maize.	Rice.	Stone, rubble.
Manure.	Rubble stone.	Straw.
Minerals.	Salt.	Wheat.
Moonj, pressed.	Sand.	
Oats.	Slate slab.	
Ore.		

It was also ruled that the classification of goods in the Tariffs in force on the railways on the dates given below should be considered as the standard and should not be altered without the previous sanction of Government:—

The E. I. Railway—October 1890.*

The S. M. Railway—June 1891.†

The R. M. Railway including Godhra-Rutlam Railway,
1st July 1895.‡

Coal Rates.—On 30th October 1891 the Government of India reduced the rates for coal, chargeable on the *through* distance over all the railways, quoting different rates for consignments of 300 maunds but less than 3,000 maunds, and for consignments of 3,000 maunds and over, and allowing rebates on consignments of over 50,000 maunds for delivery at one place, the percentage of rebate varying from $2\frac{1}{2}$ to 15 per cent according to the bulk of consignments of 200,000 to over 800,000 maunds.

* P. W. D. No. 380 R. T. of 15th May 1891.

† P. W. D. No. 491 R. T. of 23rd June 1891.

‡ P. W. D. No. 187 R. T. of 4th May 1895.

In May 1895, the scale of coal rates was revised and made applicable to—

(a) Consignments of less than a wagon load, and

(b) Consignments in full wagon loads.

The scale for the latter was—

For all distances upto 400 miles 0·18 pie per maund per mile.

For distances above 400 miles 0·15 pie per maund per mile for
the first 400 miles,
0·10 pie per maund per mile
for distances in excess of
400 miles.

It was laid down that the charge shall be calculated in all cases on the shortest route, and shall be divided among the carrying railways in proportion to the mileage passed over each, provided that when the consignment is not carried by the *shortest* route, the mileage rate to be credited in division to the railways carrying the traffic for the actual distance they carry the consignment shall not, for such railways as form part of such portion of the shortest route as may not have been followed and are not consenting parties to the adoption of the route followed, be less than the mileage rate to which they would have been entitled if the consignment had been carried by the shortest route.

The following scale of coal rates was introduced in November 1906 :—

	Pie per Md. per mile.
For all distances upto 75 miles	0·14
Plus for any distance in excess of 75 miles upto 200 miles.	0·12
Plus for any distance in excess of 200 miles upto 500 miles.	0·06
Plus for any distance in excess of 500 miles	0·05

Subject to the following conditions :—

1. That the rate shall be calculated on the through-distance between the station of origin and the station of destination of the consignment.

2. That when there are two or more routes to destination from the colliery where the traffic originates, the railway or railways forming the longer route may calculate charges on the same mileage as the railway or railways forming the shorter route.
3. The coal for the use of foreign railways is to be charged at the same rates and under the same conditions as coal carried for the public.
4. That the rates charged are divided between the railways over which the traffic is carried in proportion to the mileage of each, provided that if the distance the coal is carried over any railway is less than 25 miles, the mileage of that railway in dividing the freight shall be reckoned as 25 miles.

From September 1916 the through-rate from the coal-fields to Bombay was raised from Rs. 11-4-0 to Rs. 12-2-0 per ton including a terminal charge of 2 annas per ton levied by the E. I. and B. N. Railways for terminal services in the coal-fields.

From 1st April 1921, the rates for coal, coke and patent fuel in full wagon loads, at owners' risk, loading and unloading by owners, were revised as follows:—

	Pie per Md. per mile.
For all distances upto 200 miles inclusive	0-15
Plus for any distance in excess of 200 miles and upto 300 miles inclusive	0-13
Plus for any distance in excess of 300 miles and upto 700 miles inclusive	0-07
Plus for any distance in excess of 700 miles	0-06

Terminal Charges.—Section 45 of the Indian Railways Act 1890 permits a Railway Administration to charge reasonable "terminals" and this under Section 3 (14) of the same Act "includes charges

in respect of stations, sidings, wharves, depots, warehouses, cranes, and other similar matters, and of any services rendered thereat."

A Railway Administration is not usually called upon to provide accommodation or to render services of the nature referred to, except at the despatching and receiving stations, and the Government of India have ruled that no special charges on this account can be legally levied under the denomination of terminals by Railway Administrations on traffic passing through junctions. For the services rendered at stations of origin and delivery, local Governments and officers controlling railways are required to carefully watch and systematically scrutinize all charges of this nature, to ensure that they are in every case, reasonable and do not exceed in amount such a sum as would be arrived at by a fair appraisal of the considerations set forth in Section 46 (2) of the Indian Railways Act 1890.*

The railway administrations were required to submit a statement of all charges of the nature of terminals actually in force, with the standard classification of goods annually submitted by them to the Government of India.

Transshipment Charge.—The Railway Companies in England were permitted to make a reasonable charge for any service of transshipment performed in respect of merchandise received from and delivered to another company having a railway of a different gauge.† The Governor-General in Council considered that the English railway practice in this matter might be adopted in India with advantage and without in any way infringing the provisions of the Indian Railways Act of 1890. Accordingly he reiterated the principle that terminals on traffic passing through junctions are inadmissible, but recognised the right of railway administrations to levy a reasonable charge for any service of transshipment performed by them where a break of gauge occurred; but in the opinion of His Excellency in Council this method of

* P. W. D. No. 849 R. T. of 29th October 1891.

† Section I, 8 of the Schedule annexed to the London, Chatham and Dover Railway Company (Rates and Charges) Order Confirmation Act 1891.

augmenting revenue was to be deprecated, and when any such charge was sought to be imposed, it should take the form of an addition to the mileage charge of a reasonable amount to be determined by the circumstances of each case, and should in no case be treated as, or confounded with, a terminal charge, and should not ordinarily exceed the equivalent of a freight charge as for three miles.*

The rules for additions and alterations in the General Classification of Goods are laid down in Chapter XI of the Conference Regulations Part I 1914, pages 32-34. One of the rules to which attention may be drawn is that while the railway administrations are not allowed to transfer a commodity from a higher class to a lower class without the sanction of the Railway Board, they have the option of quoting any rate within the maximum and minimum of the class. Instead of quoting the 1st class rates for a 2nd class article, they can quote rates "equivalent to 1st class rates" for such an article. This procedure is rendered necessary in consequence of the ruling that no railway can raise its classification beyond what it was in 1891 or 1895 *vide* page 444 *supra*, and is allowed under clause 1 (a) vi of the General Rules of the General Classification of Goods.

Railway Board's No. 1423 R. T. of 13th October 1910 para. 7, laid down that any railway desiring to obtain an alteration in the class quoted for any commodity in the General Classification of Goods, should refer the case to the Classification Committee of the Conference for their approval. If this Committee support the alteration, they will refer it without unnecessary delay to the Railway Board for their sanction prior to its introduction.

The policy of Railway Administrations has been generally to encourage export and import traffic to and from foreign countries reached by sea, both by giving low rates and providing suitable types of wagons.

* P. W. D. No. 587 R. T. of 17th October 1893.

We must admit that there is a justification for it as the export and import traffic generally gives long leads and full loads. But the policy of quoting low rates for that traffic and imposing prohibitive restrictions against articles of local manufacture such as matches, glass, iron, etc., which were at one time, or are even now, denied the same rates and facilities as are allowed for imported articles, place this country at a very serious disadvantage. In the general interests of the country this policy needs a radical change, and we strongly support the following recommendation of the Indian Industrial Commission:—

"275. We have suggested an examination of the desirability of raising the existing low rates on raw materials for export. We think it equally necessary to do the same in the case of manufactured articles or materials imported.....We would, however point to the necessity of one exception to this principle in the case of imports. Machinery and stores destined for industrial use in India should be transported at the lowest rate possible."

Tariffs.—Goods are now classified under six different classes. Within the maxima and minima laid down, *vide* page 444 *supra*, the railways vary their goods rates. Besides the ordinary class rates, each railway has its own Schedule rates and Station to Station rates, which make up the bulk of the tariffs, including as they do their special rates for special articles.

So far as the General Classification of Goods and the Class rates go, they are simple and might be adopted by all railways in India; but many of the railway companies have not adopted them entirely. This coupled with the fact that each Railway Administration has its own tariff and its own Junction Rate Lists, causes difficulties in the way of the public readily finding out the charge on a through-consignment travelling over the lines of several independent administrations. These difficulties are especially great in cases which arise in connection with articles for which Railway Administrations have exceptions and variations or station to station rates. Under General Rule 3 of the General Classification of Goods, it is necessary therefore for one to look first through the long lists of station-to-station or

special rates which are given in Pamphlet I of the Goods Tariff of each principal Railway.

When no station-to-station rate is found, reference must be made to the Exception List of each Railway over which the consignment has to pass. If a rate is not quoted in the Exception List, the commodity is charged at the class rate as entered in the General Classification of Goods.

The exceptions, special rates, with various conditions attached to such rates, make the Goods Tariffs of Indian Railways difficult for the public to understand. Even Railway officials are liable to overlook some of the conditions, and controversies in connection with under-charges and over-charges are constantly going on between the Traffic and Audit Offices of one or more railways concerned, in connection with the numerous consignments daily booked and carried from thousands of stations in the country. A simple tariff for goods traffic would very largely reduce clerical work in railway offices and at stations and would be a boon to all concerned.

Puzzling Tariffs.—To illustrate how puzzling and complicated the Railway tariffs in India are, we would cite an instance from their recent history. In 1910 they introduced rule 4 in the General Classification of Goods with the object of simplifying the tariff, but it created a puzzle, which even the expert Classification Committee, composed of the highest Traffic Officials of the best railways in India, could not solve. They gave contradictory interpretations at two different times on the same case. The rule laid down that any of the conditions relating to—

- (a) Minimum weight,
- (b) Packing, pressing and measurement condition,
- (c) Prepayment of freight or otherwise,
- (d) Loading and unloading,
- (e) Bulky goods,
- (f) All other conditions,

is force on the forwarding railway would apply in through-book-
ing to the station of destination.

In an explanatory note it was laid down that the minimum weight for charge, which may be a condition of the rate charged *on the forwarding railway*, would apply *throughout the journey*.

Soon after this, certain cases cropped up and they were referred to the General Classification Committee for solution. In order to make the matter clear we would cite one of these cases and the different rulings passed by the Committee. A consignment of ground-nuts weighing 150 maunds was booked from Kolhapur to Ahmedabad, passing over three different railways, *viz*: the Madras and S. M., the G. I. P., and the B. B. & C. I. The rates and conditions applicable to ground-nuts were as follows:—

M. & S. M., Railway.—First Class on actual weight.

G. I. P. Railway.— " " "

B. B. & C. I. Railway.—Schedule A rate on 200 maunds
or 2nd Class on actual weight.

The rule required that conditions of the forwarding railway should apply *throughout*. As, however, there were alternative rates on the terminal Railway, the question arose which of its two rates should apply to the consignment. The Committee at first decided that charges should be made at first class rate on actual weight throughout, unless a lower charge would be obtainable by the application of the Differential Rule to the B. B. & C. I. Ry. proportion. The B. B. & C. I. Railway, however, did not accept this decision and the question was sent back to the Committee with the following three alternative methods of calculating the charges:—

(1) M. & S.M. Railway } 1st Class on actual weight.
G.I.P. Railway }
B. B. & C. I. Ry.-Schedule A rate on 200 Mds. minim.

(2) M. & S.M. Railway } same as (1)
G.I.P. Railway }
B. B. & C. I. Railway 2nd Class on actual weight.

or (3) M. & S.M. Railway } 200 mds. same minimum as for
G. I. P. Railway } B.B.&C.I. Railway at 1st Class rate.
B. B. & C. I. Railway-200 mds.-Schedule A rate.

The Committee then decided that the charges should be made in accordance with method 2 or 3 whichever was cheaper. When the charges for the consignment were calculated,

Method (1) gave Rs. 160-6-8

Method (2) „ Rs 202-5-6

Method (3) „ Rs. 187-8-0

It will be observed that the first method, which was according to the tariffs of the three railways, was the cheapest and should have been observed; but the Committee did not accept it either in their first or second decision. In their second decision they gave method 2 or 3, both of which were prejudicial to the owner of the goods. This one instance is enough to show that even the highest Traffic Officials could not give one interpretation on the same case. How could station clerks be expected to work correctly on such tariffs? The puzzling rule was, however, altered in September 1915, when they made the minimum weight condition of the forwarding railway applicable only on those lines which have weight condition in their tariff; for lines which do not lay down a weight condition, the charges are worked out on actual weight of consignment at the tariff rate of railway concerned. This has very materially altered the original rule 4, but still the charges for the same commodity may differ in one direction from those in the other direction between the same stations. The rule lays down nine standard weights for the minimum weight, any of which any railway may adopt, and example (i) under that rule runs as follows:—

“On Railway A, a rate is quoted for grain in minimum wagon-loads of 300 maunds. On Railway B, a rate is quoted for grain in minimum wagon-loads of 400 maunds. In booking from Railway A to Railway B, the minimum of 300 maunds will apply on the whole distance. In booking from Railway B to Railway A, the minimum of 400 maunds will apply for whole distance.”

This requires that traders should make up their consignments not according to their requirements, but according to the condition of the Railway, and people at different places are liable to

misunderstand the effects of the rule. This cannot be regarded as a satisfactory rule.

Through Rates.—Under para. 3 of the General Rules in the General Classification of Goods, the sum of rates quoted by each Railway over which goods pass, is the through-rate as given in their respective Junction Rate Lists, except when Station-to-Station or Adjusted or Schedule rates, are quoted on the through distance over more than one railway. On some of the railways Schedule rates, originally intended for their local traffic have been made applicable to through-traffic also, and some of these Schedule rates are based upon telescopic or sliding scales for the distance on each line. By taking separate rates for each railway, the public have to pay higher rates than they would work out if calculated on the through-distance over the several lines. This is contrary to the principle laid down by the Government of India in their No. 1446 R. T. of 1887 that the various railway systems should serve the country as if they were under one management; that they must give reasonable facilities for public traffic between any two stations, each administration being contented to receive for its share of the through-rate, less than its ordinary local rate. It is contrary also to the spirit of the Indian Railways Act as pointed out by the Special Commissioner for Indian Railways, Mr. Thomas Robertson, C. V. O., in the following terms in para 195 of his Report of 1903:—

“On through traffic, that is, traffic going over more than one Company's line, all fares and rates should be calculated on the through distance (this is really expected by the Railway Act, but in practice is rarely done), and the reduction should always be applied on the entire distance and not merely on the local distance of each railway. It is the practice that prevails in India of calculating rates on the distance to the Junction only, which is to some extent responsible for a good many of the high rates now obtaining, since the traffic only gets the benefit of sliding scales of rates on the local distance to the junction instead of on the whole distance that the traffic is carried. But if the long-distance-traffic is to be developed in the manner that such traffic has been developed in America,

the distance must be taken from the station of origin to the station of destination, and the charges calculated on this through distance at the reduced rate."

Para 273 of the Report of the Indian Industrial Commission 1916-18 made a similar recommendation. As most of the Indian Railways belong to the State, the telescopic and sliding scales of rates should be calculated on the through-distance, and through-rates divided according to mileage between the railways concerned. The public give traffic for long distances, yet under the divided interests due to separate administrations, the people do not get the main object of the scale rates.

Under rule 8 (a) of the General Classification, the minimum distance for charge is 10 miles for each railway. This charge should not apply to through-traffic, nor should it be levied for *each* railway separately. Most of the railways belong to the same State. One would naturally ask why the charges are made separately for each railway? The answer is that the different parts of the State property have been made over to the different companies for working purposes. The system of making separate charges for each administration's length of the through distance practically adds an indirect toll on through-traffic. Take for instance the toll levied on traffic passing at Cawnpore from the B. B. & C. I. Railway metre gauge on to the O. & R. Railway broad gauge or *vice versa*, where the actual distance is one mile only belonging to the E. I. Railway. The break of gauge is through no fault of the public, who should not be made to pay the toll to the E. I. Railway. In another case, the line between Delhi and Ghaziabad, 13 miles, again belongs to the E. I. Railway, which levies its ordinary rates including Short Distance Charge on traffic passing between the B. B. & C. I. Railway and the N. W. or the O. & R. Railway, which is a heavy toll for the short distance, especially in those cases in which the goods are charged over the other railways at special low rates,

Simplification of Goods Tariffs.—We have already alluded to the complicated nature of Railway Tariffs. This complaint is very old. The late Government Director of Indian Railways at

the India Office, marked it during his visit to India as early as the year 1875-76. In his Annual Report for that year to the Secretary of State, the late Sir Juland Danvers described the difficulties which the public as well as the Railway clerks experienced when booking a consignment through to two or more lines. He concluded that—

“Until the tariffs of all Indian Lines are far more simple than they are at present, these difficulties will always act in a certain measure as a bar to through traffic. A uniform tariff throughout all Indian Railways would be an immense boon.”

This was written 46 years ago, when the tariff of even the largest Indian railway was in a small single pamphlet. Now each of the twelve principal railways has three or more bulky volumes of Goods Tariff, the difficulties of the public and Station Clerks may well be imagined than described.

The Government Director referred to the subject again in 1881-82 and remarked—

“Now that through-booking over several lines is largely practiced, it is very desirable that goods should be classed on one uniform system and that the through-charge should be clearly understood by consignors.”

The Government of India repeatedly draw attention of the railway Companies to this subject, and the Railway Conference of 1888 passed a resolution, see page 442. Again in 1903 Mr. Thomas Robertson in paras 204-5 of his Report made the following recommendations:—

“201. *Classification of Goods and through rates.*—For through booking, that is in the case of traffic passing over more than one railway, there should be one General Classification of goods for all India and subject of course to exceptions, one scale of rates applicable on the through distance from station of origin to station of destination. This is now the general practice both in England and in America. The present practice of permitting each railway to have a separate classification and a separate scale of rates applicable on the local distance to the junction only, leaves the public in much uncertainty as to what the rates are and gives the goods and other clerks a great deal of unnecessary trouble in calculating the charges and preparing the way-bills and invoices. All rates should be calculated on the prescribed scale by the shortest route and divided in mileage proportion,

between the railways forming the shortest route, or between the railways forming such other longer route as may by mutual agreement be used for the traffic."

"205. That the station clerks should be furnished with a table of distances and a scale of rates, and they should be required to enter only the through-rates in the Way-bill or Invoice. The division of charges between the several railways should be done in the Audit Office as in England."

We are not sure that his recommendations have yet been carried out. The Railway Administrations do not, it is evident, see the great convenience, utility, and saving of labour, which are to follow a simple tariff of Goods Rates. The bulk of the traffic is in a small number of commodities. These may be charged on a simple basis and all special rates and exceptions be withdrawn. The railways belong to the people who alone have to pay for their maintenance. The divided interests created by the employment of companies are responsible for the artificial barriers employed in the use of the railways. The railway companies alone are responsible for the delay of half a century in the simplification of the Tariffs which both the Government and the people have been trying to get done.

Development of Local Industries.—"I do not think" wrote Mr. Robertson, "sufficient attention is given to the creation and development of local industries. The more numerous the local industries are along a line of railway, the greater always is the prosperity of the railway. They not only give their products to the railway to carry but their presence creates a great deal of traffic in both passengers and goods, which but for the local manufactories would never come to the railway at all. Every encouragement should therefore be given to the opening up of more local industries by offering special facilities in the way of rates and accommodation at all events until they are fairly started and giving more easy terms in regard to the laying down of sidings to the works" (para. 208). We endorse every word of this recommendation.

In 1903 Mr. Thomas Robertson compared the actual average goods rates per ton per mile in England and India as under:—

		England	India
		Pies.	Pies.
Merchandise ...	...	23·76	6·72
Minerals ...	...	9·34	3·55

He premised that for a comparison to be of any value, consideration must be paid to the circumstances of the two countries; if like is compared with like, he thought that the fares and rates in India should broadly speaking, be only about one-sixth of those charged in England. He also remarked that in the case of 1st and 2nd classes, passengers in India get extra accommodation but the 3rd class passenger in India seldom got as good accommodation as was given in England.

“Before therefore the fares and rates in India can be regarded, relatively as even equal to those in England,” he declared, “the former would require to be lower than the rates now charged—

For passengers by about from 18 to 40 per cent.

In general merchandise „ 30 to 60 „

For coal ... „ 40 to 60 „

He added that in America the rate for all merchandise averaged under 0·724 cent. or 4·344 pies per ton per mile, and where water competition existed wheat was carried at a profit at as low a rate as 2 pies a ton a mile, and other commodities, such as maize, at still lower rates, and both the cost of construction and working were greater in America than in India. The cheap rates in America were due to the great economies obtained by the use of high-power Engines carrying 3,000 to 4,000 tons and high capacity bagie wagons taking 50 ton-loads.

Appendix 12 shows the average cost of hauling a ton of goods one mile in India. On the East Indian Railway it varied from 1·13 to 1·28 pies per ton per mile. For the reasons given at page 429 the Standing charges may be excluded in quoting special rates.

The same appendix shows the average sum received for carrying a ton of goods one mile on the principal railways in India in 1912 and 1915-16. The sum varied as follows:—

2.81 to 3.14	pies on the	E. I. Railway.
3.17 to 3.93	„ „	B. N. Railway.
4.08 to 4.62	„ „	N. W. Railway.
4.71 to 5.12	„ „	O. & R. Railway.
5.29 to 5.84	„ „	B. & N. W. Railway.
5.50 to 6.41	„ „	R. M. Railway.

The scale of coal rates in force from 1906 to 1916 gave only 1.67 pies per ton per mile on a lead of 1,320 miles from Raneeegune to Bombay via Jubbulpore, Amalner and Kankrakhari.

The average sum for all the railways in India was 4.34 pies in 1915-16 and 4.08 pies per ton mile in 1917-18. The corresponding figure for the Japanese State Railways in 1917-18 was 0.0176 Yen = 5.16 pies per ton-mile.

SECTION 4.—Competition between railways.

The financial success of a railway depends very largely upon a judicious manipulation of its rates and fares for goods and passenger traffic. The main principle that should guide the railway managers is that a maximum service is rendered with a minimum of charge. This principle requires the lowest possible rates and fares to attract all possible traffic. Where the traffic is considerable as is the case in many parts of India, the working of railways should prove highly satisfactory both to owners and users of the railways; but so far as the Indian public are concerned, they have not so far had that satisfaction which is their due, both as owners and as customers of the railways.

In the early period of the Indian railways, the Guaranteed Companies, who had entire command of the railways, charged high, sometimes prohibitive, rates and fares, with the result that their earnings did not cover even their interest charges.

Before 1881 the railway companies had practically a monopoly for all traffic to and from the districts they traversed, and

they charged whatever rates they chose within the high maxima rates laid down by the Local Governments.

After personal inspection of the Indian Railways in 1876, the Government Director reported—

"31. It may be said that high and low rates are simply comparative terms which convey no definite meaning. As applied to the circumstances of India, I would describe rates as high when they fail to secure the conveyance of the produce of the districts through which they pass, or of the goods imported into those districts; when they prohibit or unduly check traffic, and thus restrict trade; when they discourage extended production; and when they raise the cost of conveyance by diminishing the use of the carrying stock. This has been too much the case hitherto and therefore railways have not yet conferred upon the country the full benefits, nor yielded the profits which they might have done."

In 1879-80 he observed that about 97 per cent of the goods and 96 per cent of the passengers on the Indian railways were carried at the lowest charges, that while the lowest class of goods were put down at 8, 9, 10 and 12 pies per ton per mile, there were special rates as low as 4, 4.5 and 5 pies per ton per mile, that these rates were both low and remunerative, but compared with those on some American lines, the charges were still high. There a ton of grain was carried 450 miles for 10s. (=5 rupees). In India the charge for the same distance at 5 pies per ton--mile was upwards of 22s. (=11 rupees).

Best results have, however, been latterly obtained by the Indian Railways with lowest rates and fares, which the Companies were compelled to quote under competition started by the State* Railways. Competition between the Indian Railways themselves did not come into play till the end of the year 1880 and was confined mainly to goods traffic which is so considerable that the Railway Administrations in India do not much attempt to compete or care for passenger traffic. The latter has consequently been neglected especially in those respects where the comforts and conveniences of Indians are concerned.

*See paras. 4458-60 of Evidence before the Select Committee of 1884.

On the 1st of January 1881, the through opening of the Rajputana State Railway established a direct communication between Bombay and the Upper India including the United Provinces and the Punjab. This communication created a competition not only with the old circuitous route between Bombay and Upper India via Jubbulpore and Allahabad, but also a strong competition between the ports of Calcutta and Bombay for export and import goods between India and overseas countries.

Generally as the new railways came into existence, the competition extended to goods for Karachi and other ports and for many places in the interior of the country.

The competition between the railways considerably brought down the goods rates, and improved the service, especially in the competitive zones and for traffic to and from beyond the seas. For instance the rate for grain from Delhi to Bombay which was 11 annas per maund in 1887 and still higher in 1881, was reduced to 7.5 annas per maund. The local rates for non-competitive regions of India, however remained and are still high and in some cases arbitrary.

Competition did serve a very useful purpose wherever there were competitive routes, but the policy of Government has been generally to disallow the construction of lines which are likely to compete with each other. Still a large number of parallel lines have come in and competition could not be avoided, owing to the divided interests created by the separate administrations of Government and of individual companies.

History repeats itself is an apt saying, but the Indian railways did not repeat the history of the American railways, many of which have been through the Receiver's hands and their capital written down, owing to their bankruptcy brought about by reckless competition. In America the competition between the railways forced down the rates which proved unprofitable, but the railways had to adopt economic methods of working and high grade locomotives and rolling stock, which materially reduced the

costs of their working and made the low rates profitable. In the matter of competition, taking a warning-lesson from America, the Indian Railways have generally followed the railways of England, where the tendency of railway companies has been towards union and extension, and their competition usually ended in combination and amalgamation. As railways have the same business of carrying traffic, they cannot continuously go on reducing their rates for ever, continued competition in their case must fail to do that good which it does for trade or business, which is constantly changing, with various conditions and forms. The railways of India after severe competition, at one time reaching a climax, have come to the English system of combination, agreement for pooling or division of traffic earnings between the competing lines. While competing in some cases they charged minima rates authorized on their own routes, with maxima or block-rates wherever a competing route used a part of their system. The competition continued from 1881 to September 1916. From October 1916 enhancements in goods rates were made chiefly to and from the port-cities. It is some satisfaction that a policy of allowing favourable rates for Indian industries was at the same time extended. The enhancements are a result of combination, after competition had settled the territories for each railway and each port, and had defined the shares of traffic for various lines and routes. To our mind these territorial arrangements are not at all necessary, as they are based upon competitive principle of bed-rock rates which admit of block-rates in some cases.

As the State is the proprietor of all the trunk lines, with the exception of the B. & N. W. and the R. & K. Railways, the rates and fares all over India should be calculated on one basis, without the block-rates at any point and the traffic should be carried by the shortest route, except where a too costly transshipment is involved, owing to a break of gauge. There should be no consideration as to individual interests of companies, so far as the through-rates are concerned. Will the Agency Companies carry out this principle? Will they totally abolish all rates which encourage foreign export and import to the detriment of local industries and trade, and charge equal mileage rates for like traffic in such cases? The present rates between Delhi and the three ports compare as follows with the rates in force before October 1916:—

and London via Bombay India Railway, and the R. & K. Railway of India

	Howrah.		Bombay.		Karachi.	
	September 1916. Rs. a. p.	October 1916. Rs. a. p.	September 1916. Rs. a. p.	October 1916. Rs. a. p.	September 1916. Rs. a. p.	October 1916. Rs. a. p.
Import Goods.						
Piece Goods	1 15 7	2 1 1	1 15 7	2 1 1	1 15 7	2 1 1
Iron & Steel	0 11 7	0 14 7	0 11 7	0 14 7	0 11 7	0 14 7
Kerosine Oil	0 11 2	0 14 0	0 11 2	0 14 0	0 11 2	0 14 0
Sugar	0 13 5	0 14 9	0 13 5	0 14 9	0 13 5	0 14 9
Export Goods.						
Grain & Seeds	0 7 6	0 9 4	0 7 2	0 8 11	0 7 7	0 9 5
Cotton at owners' risk...	0 15 11	1 6 2	1 2 4	1 6 2	1 2 4	1 6 2
„ at Ry. risk	1 1 8	1 7 8	1 2 10	1 6 8	1 2 10	1 6 8

From 1920 all these Commodities, excepting grain and seeds, are charged at ordinary class rates, which are equal for the three ports to and from Delhi.

With the agreements for pooling of traffic and division of earnings between the competing lines, competition has mostly ceased. Healthy competition was one of the reasons for employing the Agency Companies.

Section 5.—Legislative Provisions.

Section 47 (1) of the Indian Railways Act, No. IX of 1890, lays down that every railway company and, in a case of a Railway administered by the Government, an officer to be appointed by the Governor-General in Council in this behalf, shall make general rules consistent with that Act, for regulating the terms and conditions on which the railway administrations will *warehouse or retain goods at any station on behalf of the consignee or owner; and generally, for regulating the travelling upon, and the use, working and management of the railway.* (The Italics are ours).

Para. 2, Chapter II of Part II of the General Rules made under the above statute, vide Railway Board's Circular No. R. T. $\frac{89 \text{ A.}}{5}$ dated 8th September 1906, which deals with the carriage of passengers, simply requires a passenger to provide himself with a ticket for the journey he is to undertake.

Section 66 (1) of the same Act lays down that every person desirous of travelling on railway shall, upon payment of his fare, be supplied with a ticket, specifying the class of carriage for which and the place from and the place to which, the fare has been paid, and the amount of fare.

The Act as well as the General Rules made under Section 47 of the Act are totally silent as to who should fix the rates and fares for passengers, goods, etc. In the case of goods traffic, however, Chapter V of the Act deals with the matter of undue or unreasonable preference or advantage, and Section 42 (2) lays down that a railway administration shall not make or give any undue or unreasonable preference or advantage to or in favour of any particular person, or railway administration, or any particular description of traffic, in any respect whatsoever, or subject any particular person or railway administration, or any particular description of traffic to any undue or unreasonable prejudice or disadvantage in any respect whatsoever. And the power of deciding whether a lower charge does or does not amount to an

undue preference is, under Section 43 of the Act, vested in a Railway Commission which may be appointed specially by the Governor-General in Council under Section 26.

It is thus evident that the Indian Railways Act does not deal with the matter of *fixing* the rates and fares for goods, passengers and other traffic. The powers regarding these rates and fares have, however, been all along laid down in the contracts between the Government and the various Railway Companies, so far as the lines administered by the companies are concerned. As regards the lines worked by the direct agency of Government, the Rates and Fares are regulated under the Departmental orders of the Government. The act is silent on the subject.

Clause 8 of the original contracts of the late Guaranteed companies was found to be defective as shown in the opening part of this Chapter, page 405. The mischief was chiefly in the maxima rates and fares laid down by Government, which were of no practical value. They were far too high and Government could not persuade the companies to reduce their charges until their net earnings came to 10 per cent on the capital outlay. The Delegate of the Indian Government made a strong complaint against the companies on this subject before the Select Committee of 1884.

The clause on Rates and Fares embodied in the E. I. Ry. Company's contract of 1879 was meant to avoid the troubles experienced with the older Companies but ten years after that Contract, the Company, armed with a legal opinion, advanced a claim that the obligation of the contract contemplated the prescription of a separate maximum and a separate minimum rate for each of the five different classes of goods and that within the limits so laid down, the Company had the power to vary their charges without reference to Government. This was practically a repetition of the old history of the Guaranteed Companies, for they too claimed that by once prescribing the maxima rates, the Government had exhausted their powers. The Government with their usual leniency with these Companies, accepted the extraordinary claim and prescribed a separate maximum and a separate

minimum for each of the classes, and went quite beyond the terms of the contract by allowing the Companies freedom to vary their Rates and Fares within the maxima and minima, without reference to Government.

The contract of 1879 laid down that—

“the Company shall charge rates and fares as may from time to time be fixed by the company *with approval of the Secretary of State.*”

The italics are ours. The Secretary of State, moreover, had retained the further power to have the rates reduced to one-sixth pie per maund per mile for goods and to 2 pies per mile for passengers. We find no word in the contract to support the claim of the E. I. Ry. Company. At the time the E. I. Ry. contract was executed in 1879, there was no idea of minima rates. The Schedule of 1869 had only *maxima* rates but no *minima*, and the revised wording of the clause was adopted to remedy the former defects.

Clause 20 of the S. M. Ry. contract of 1st June 1882 was a repetition of the E. I. Ry. clause of 1879.

The minimum rates were for the *first* time mentioned in Clause 16 of the Indenture dated 24th September 1884 with the B. B. & C. I. Ry. Company for the working of the R. M. Ry. This contract laid down that the Government “shall have power from time to time to fix and vary both maximum and minimum rates with a reasonable difference between them for the carriage of passengers and goods.....” This departure was probably responsible for the E. I. Ry. claim.

After this, were the contracts dated October 1885 with the I. M. Ry. Company, and dated November 1890 with the S. I. Ry. Company. Both of them had a like clause (26 and 32), which allowed the Companies to charge the public for conveyance of passengers and goods—

“such rates only as shall for the time being be approved by the Secretary of State. The Company may from time to time and at the request of the Secretary of State shall submit for the approval of the Secretary of State maximum and minimum rates within which the com-

pany is to be at liberty to charge for such services and the Secretary of State may approve such rates with such modifications as he shall think fit and may also from time to time require the company to make such modifications in the maximum and minimum rates for the time being in force as he shall think fit."

All these contracts provided ample powers for the Government to vary the Rates and Fares. In the contract dated 21st December 1900 with the new G. I. P. Ry. Company, however, we find clause 16, which has been repeated in the subsequent Contracts with the B. B. & C. I. the South Indian and other Agency Companies. This clause is quoted below in full :—

"(1) The Secretary of State shall from time to time authorise maximum and minimum rates within which the company shall be entitled to charge the public for services rendered by way of or in connection with the conveyance of passengers or goods on the undertaking, and shall prescribe the several classes and descriptions of passengers and goods to which such rates shall be respectively applicable, as well as the extent to which, within the maxima and minima so authorised, the Company may vary the said rates in respect of the distance or weight or special conditions under which such conveyance takes place or services are rendered.

(2) The Secretary of State shall give the company not less than three months' previous notice in writing of his intention to make any change in the rates or classification so authorised and prescribed, and unless the company shall assent to such change it shall not be operative until the expiry of the said notice. Provided that when the Secretary of State shall declare that a change is necessary to meet a public emergency it shall suffice for him to give such shorter notice as he shall consider reasonable.

(3) In making charges to the public for services under this Section, the Company shall not, without the special sanction of the Secretary of State, calculate the same otherwise than in accordance with the rates authorised in the manner herein prescribed, or make any reduction by rebate or otherwise that will have the effect of bringing any rate actually paid below the minimum authorised in the manner herein stated. The term 'goods' shall, as regards this section, include everything conveyed on the undertaking, passengers only excepted."

It will be observed that the foregoing clause has materially curtailed the powers of Government and increased those of the Companies. It has limited the powers of Government to authorizing or changing the maxima and minima between which the Companies have full power to vary the actual rates; whereas under the former contracts the Companies were to "charge rates and fares as may from time to time" be approved by Government. It is surprising that the Government have adopted such a suicidal policy. The Government have discontinued the publication of these contracts in the annual Administration Reports after 1900 and the public have no chance of examining them. I wrote to the Railway Board for copies of the contracts but the same were not supplied.

It is a question for the Indian Legislature to consider whether the Secretary of State should continue to exercise the autocratic powers of renewing, extending, or entering into new, contracts with companies or varying the terms of such contracts without consulting the Legislature.

In Section 6 of Chapter VI herein, we have given the general powers of Government over the Railway Companies, among which is the absolute right of veto in all proceedings at any meeting of the Companies' Directors. This is a very wide power and the Government ought to exercise it in the interests of the public, whenever they disapprove of any action on the part of the Companies. The Government occupy the double position of—

- (1) Proprietors of the State Railways,
- (2) Guardians of public interests.

In the latter position, they have allowed freedom to the Companies to vary the Rates and Fares within the maxima and minima prescribed, but they should not divest themselves of their powers as Proprietors of the Railways.

We maintain that these powers are the same as the Government exercise over the State Railways worked by their direct agency. Under the right of veto, if no other power be available, Government should guard the public interests to the utmost extent possible.

After all, what is the position of the Companies? They have no proprietary rights in the State Railways; their working in the words of Lord Lawrence has been as "bad and as extravagant as anything that the strongest opponent of Government agency could suggest." If the Companies would not carry out the reforms necessary for the public, their contracts should be ended. People look to the Government to guard their interests.

The Indian Railways Act is very defective so far as the law relating to classification of traffic and schedule of rates and fares are concerned. In the English Railway and Canal Traffic Act 1888 (51 and 52 Vict, Ch. 25), Section 24 deals with goods rates, and the American law quoted at page 441 applies both to goods and passengers. Similar provisions should be made in the Indian Railways Act both as regards Goods and Coaching Traffic. For ready reference we reproduce Section 24 of the English Act:—

"24 (1) Notwithstanding any provision in any general or special Act, every railway company shall submit to the Board of Trade a revised classification of merchandise traffic and a revised schedule of maximum rates and charges applicable thereto, proposed to be charged by such railway company, and shall fully state in such classification and schedule the nature and amounts of all terminal charges proposed to be authorised in respect of each class of traffic, and the circumstances under which such terminal charges are proposed to be made. In the determination of the terminal charges of any railway company regard shall be had only to the expenditure reasonably necessary to provide the accommodation in respect of which such charges are made, irrespective of the outlay which may have been actually incurred by the railway company in providing that accommodation.

(2) The classification and schedule shall be submitted within six months from the passing of this Act, or such further time as the Board of trade may, in any particular case, permit and shall be published in such manner, as the Board of trade may direct.

(3) The Board of Trade shall consider the classification and schedule, and any objections thereto, which may be lodged with them on or before the prescribed time and in the prescribed manner, and shall communicate with the railway company and the persons (if any) who have lodged objections, for the purpose of arranging the differences which may have arisen.

(4) If, after hearing all parties, whom the Board of Trade consider to be entitled to be heard before them respecting the classification and schedule, the Board of Trade come to an agreement with the railway company as to the classification and schedule in a Provisional Order, and shall make a report thereon, to be submitted to Parliament, containing such observations as they think fit in relation to the agreed classification and schedule.

(5) When any agreed classification and schedule have been embodied in a Provisional Order, the Board of Trade, as soon as they conveniently can after the making of the Provisional Order (of which the railway company shall be deemed to be the promoters), shall procure a Bill to be introduced into either House of Parliament for an Act to confirm the Provisional Order which shall be set out at length in the Schedule in the Bill.

(6) In any case in which a railway company fails within the time mentioned in this section to submit a classification and schedule to the Board of Trade, and also in every case in which a railway company has submitted to the Board of Trade a classification and schedule, and after heard hearing all parties whom the Board of Trade consider to be entitled to be before them, the Board of Trade are unable to come to an agreement with the railway company as to the railway company's classification and schedule, the Board of Trade shall determine the classification of traffic which, in the opinion of the Board of Trade, ought to be adopted by the railway company, and the schedule of maximum rates and charges, including all terminal charges proposed to be authorised applicable to such classification which would, in the opinion of the Board of Trade, be just and reasonable, and shall make a report, to be submitted to Parliament, containing such observations as they think fit in relation to the said classification and schedule, and calling attention to the points therein on which differences which have arisen have not been arranged.

(7) After the commencement of the session of Parliament next after that in which the said report of the Board of Trade has been submitted to Parliament, the railway company may apply to the Board of Trade to submit to Parliament the question of the classification and schedule which ought to be adopted by the railway company, and the Board of Trade shall on such application, and in any case may, embody in a Provisional Order such classification and schedule as in the opinion of the Board of Trade ought to be adopted by the railway company, and procure a Bill to be introduced into either House of Parliament for an Act to confirm the Provisional Order, which shall be set out at length in the schedule to the Bill.

(8) If, while any Bill to confirm a Provisional Order made by the Board of Trade under this section is pending in either House of Parliament, a petition is presented against the Bill or any classification and schedule comprised therein, the Bill, so far as it relates to the matter petitioned against, shall be referred to a Select Committee, or, if the two Houses of Parliament think fit so to order, to a joint Committee of such Houses, and the petitioner shall be allowed to appear and oppose as in the case of a private Bill.

(9) In preparing, revising, and settling the classifications and schedules of rates and charges, the Board of Trade may consult and employ such skilled persons as they may deem necessary or desirable; and they may pay to such persons such remuneration as they may think fit and as the Treasury may approve.

(10) The Act of Parliament confirming any Provisional Order made under this section shall be a public general Act, and the rates and charges mentioned in a Provisional Order as confirmed by such Act shall, from and after the Act coming into operation, be the rates and charges which the railway company shall be entitled to charge and make.

(11) At any time after the confirmation of any Provisional Order under this section any railway company may, and any person, upon giving not less than twenty-one days notice to the railway company may, apply in the prescribed manner to the Board of Trade to amend any classification and schedule by adding thereto any articles, matters, or things, and the Board of Trade may hear and determine such application, and classify and deal with the articles, matters, or things referred to therein in such manner as the Board of Trade shall think right. Every determination of the Board of Trade under this sub-section shall forthwith be published in the "London Gazette" and shall take effect as from the date from the publication thereof.

(12) Nothing in this section shall apply to any remuneration payable by the Postmaster-General to any railway company for the conveyance of mails, letter-bags, or parcels under any general or special Act relating to the conveyance of mails, or under the Post Office (Parcels) Act, 1882.

(13) Nothing in this section shall apply to any remuneration payable by the Secretary of State for War to any railway company for the conveyance of War Office stores under the powers conferred by the Cheap Trains Act 1883."

No such provision is contained in the present Indian Railways Act, nor is any mention made in the Act of the powers of

Government reserved in the contracts with the Railway Companies. The British Companies working the Indian Railways are incorporated in England under the Companies Acts in force there. Why the Indian legislature did not make provisions with regard to the fixing of rates and fares in the Indian Railways Act was due to the fact that the contracts of the railway companies had a clause to the effect that any enactments which might be passed by the Legislature in India for the regulation of affairs of railways worked by the Companies should be according to the terms and provisions of those contracts. The clauses in the contracts of the old Guaranteed Companies and of the new E. I. Railway Company have been curiously interpreted, as we have shown at pages 405 and 466, and the provisions in the contracts of the different companies were not exactly similar.

It is however unfair to the public in India to leave this matter altogether out of the statute. The old Guaranteed Companies are non-existent now, and the law on the subject should be completed at the earliest date possible.

The Indian Railways Act of 1890 was intended to establish a clear distinction between the State as a railway proprietor and as the guardian of the interests of the community at large.

In introducing the Railway Bill in the Legislative Council on 25th October 1888, the Law Member stated that—"The power of the Government of India in regard to some of these railways is limited, to a greater or less extent, by the contracts made with the various Companies by which the railways have been constructed or are worked. In framing the present Bill care has been taken to maintain the provisions of these contracts so far as they are consistent with a due regard to the public interest." Referring to the amendments of greater importance provided in Chapter V, which were aimed at securing proper and impartial facilities for traffic, he said: "Under the contracts and otherwise the Government has power to fix maximum and minimum rates and fares for the carriage of passengers and goods

and Railway Administrations are allowed to alter their charges, within the prescribed maxima and minima, so as to suit the varying conditions under which their business is carried on. But although Government in the exercise of a wise discretion, ordinarily abstains from direct interference with rates, there are certain ruling principles with which it is bound on behalf of the public who use the railways to require compliance."

On 21st March 1890 in moving that the Report of the Select Committee on the Bill to consolidate, amend and add to the law relating to Railways in India be taken into consideration, the Law Member of Government said:—"The first observation that I have to make regarding this Bill is that it is of general application. It extends to all railways in British India, whether belong to the State or to Companies. A claim has been made by some of the older Guaranteed Companies to have a clause inserted that nothing in the Act should affect existing contracts between the Government and those Companies in the particulars for which such contracts expressly provide, and this claim has received the support of very high authority. But upon careful consideration, the Select Committee decided not to introduce such a clause into the Bill. When I laid the draft before the Council in October 1888, I stated that in framing the Bill care had been taken to maintain the provisions of those contracts so far as they are consistent with a due regard to the public interest, and in the Bill, as amended by the Select Committee, this condition has been scrupulously observed. Indeed, I am not sure that in our anxiety not to interfere with vested right to have not given a more liberal interpretation to some of the provisions of these contracts than a Court of law would have done, and I think it will be found, upon a candid examination that there is nothing in the Bill to affect injuriously the contract rights of the Companies so as to give them any reasonable ground of complaint."

How some of the powers reserved to the Governor-General in Council in the Railways Act were exercised is exemplified by the instance of the Risk Note Forms authorized under Section

72 (2)b of Act IX of 1890. We quote below what Mr. Thomas Rebertson wrote in 1903 on those Risk Notes—

Risk Notes. The conditions attaching to the Risk Notes in use on Indian railways, which it may be mentioned have the sanction of law, are of a very onerous nature. Railways are not only exempted from all liability for loss or damage to the property while in transit which they could not with due care have prevented, but they are relieved of responsibility for the wilful acts of their own servants. In other words, if a consignment has totally disappeared while in the possession of the railway, the Law Courts hold that no claim lies against the railway under the present wording of the Risk Note. In England a Railway is not exempted from liability for the wilful acts of its own servants, and the present conditions in the Indian Risk Note cannot work in the best interests of the country.....and I am of opinion that the Indian form should be assimilated to the English form."

Accordingly the Risk Note form was somewhat rectified in 1906 but complaints are still made by the public, as the railway administrations accept liability only for "the loss of a complete consignment or of one or more complete packages forming part of a consignment due either to the wilful neglect of the railway administration or to theft by, or to wilful neglect of, its servants." The burden of proving negligence of the railway or of its servants or agents is imposed upon the owner of goods, while the goods remain entirely in the custody of the railway over a long distance, where it is impossible for the owner to trace the neglect or theft on the part of the railway servants or agents. Claims for compensation for losses are repudiated by the railway administrations and the public are helpless. It is hoped the representatives of the people in the reformed Councils will see that the railways are not allowed in the future to compel the people to sign one-sided provisions made in the printed forms used by the railway administrations.

Section 42 of the Indian Railways Act requires every Railway administration to afford all reasonable facilities for the receiving, forwarding and delivering of traffic local as well as through, in that making or giving any undue or unreasonable preference

or advantage to any particular person or railway administration, or any particular description of traffic, in any respect whatsoever; and gives to the Railway administration the option of accepting or not the proposed through-rates for such through-traffic. In a case of disagreement, the Governor-General in Council may, if he think fit, on the request of a railway administration, refer the matter to Railway Commissioners to be specially appointed under Chapter V of the Act for their decision. The "Commissioners in apportioning the through-rate shall take into consideration all the circumstances, of the case including any special expense incurred in respect of the construction, maintenance or working of the route or any part of the route, as well as any special charges which any railway administration is entitled to make in respect thereof;" "the Commissioners shall not in any case compel any railway administration to accept lower mileage rates than the mileage rates which the administration may for the time being legally be charging for like traffic carried by a like mode of transit on any other line of communication between the same points, being the points of the departure and arrival of the through-route."

The Act has been in force for 30 years but no such Commission has been ever appointed to decide a case of the kind. The provisions of the above section, however, it appears, give Railway administrations practically the power of charging as much as their local rates on through-traffic as well, which is not the intention of the general rule iv laid down in Government of India Reso. 1446 R. T. of 12th December 1887.

In 1903 Mr. Robertson, in para. 61 of his Report, suggested the appointment of a Standing Commission under Chapter V of the Indian Railways Act, and the revision of the Act on the lines of the English Railway and Canal Traffic Act, but no action appears to have been taken on it by the Government.

CHAPTER VIII.

State Versus Company Management.

SECTION 1.—Motions in the Viceregal Council and results of enquiries by the Railway Board.

THIS question has been seriously engaging the attention of the Indian public for many years. It has been brought up before the Legislative Council many a time. It was *indirectly* raised in the Budget debates of 1910, 1912 and 1913; while in 1914, 1915, 1917 and 1918, resolutions on the subject were directly moved in the Viceregal Legislative Council. It is interesting to give a brief account of the motions brought up in those seven years.

On March 19th, 1910, the Hon. Mr. Gokhale moved that "this Council recommends that the provision for the working expenses of State railways for the next year should be reduced by one crore of rupees." He complained that the working expenses for the 15 years between 1890 and 1905 were between 46 and 48 per cent. of the gross receipts, there being only one year in which it was 49; whereas from the time that the Railway Board came into existence this proportion had gone up. In 1906 it rose to 50, in 1907-08 to 57·5, in 1908-09 to 62, and in 1910 to 55·3 per cent. He suggested that it would be very desirable if State Railways were managed by the State instead of their being managed by companies, and claimed one distinct advantage, *viz.*, that in the end State management would be more economical, that the Government would be more sympathetic with the aspirations of the people than the Boards of Companies sitting in London. The resolution was, as might be expected from the then constitution of the Council, rejected, eleven members (all Indians) voting for it, while 31 European

members and the Hon. Sir S. P. (now Lord) Sinha of Raipore, the Hon. Malik Umar Hyat Khan and the Hon. Kanwar Sir Ranbir Singh being against it.

The second indirect motion was made on March 1st, 1912, when the Hon. Sir Vithaldas Damodar Thackersey moved the following resolution:—

“ That this Council recommends the Governor-General in Council that a committee composed of officials and non-officials be appointed to enquire into—

(1) The policy followed at present in fixing goods tariffs and its effects on the development of Indian industries, and on inter-provincial trade;

(2) The extent, if any, to which the principle of non-interference with vested interest is recognised in dealing with proposals for the construction of new lines with special reference to its effects, if any, on the opening of out-lying tracts and the creation of monopolies in favour of existing lines; and

(3) The desirability of associating members of the commercial community with the deliberations of the Railway Board either by nomination to it of one or two additional members from among them or by constituting an advisory committee of representatives elected from the different important centres.”

The Hon. Mover referred to the higher rates charged by the Railways for articles of Indian manufacture, such as matches from Ahmedabad, Glass-ware from Ambala, Indian Sugar, etc., than those charged for the same articles imported from foreign countries and carried from the ports; he referred also to the lower rates for cotton-seed carried to the ports for export than the rates for oil or oil-cake for use in the country. The only answer which Sir T. R. Wynne could vouchsafe was that “ those desirous of developing local industries should cultivate very close relations with railway administrations whose assistance they require.” This is open to objectionable interpretations.

The arguments modestly used by Sir Vithaldas were sufficiently strong, but the answers given on behalf of Government by

the Hon. Sir T. R. Wynne and the Hon. Mr. Clark, were weak and evasive; yet when the motion was put to the vote it was lost by 20 against 33 votes. The minority included the Hon. Mr. Madge and all Indian members, except the Hon. Syed Ali Imam, who as an official voted with the European officials.

The facts brought to light in these two discussions were sufficiently strong against the leasing of State Railways to English Companies, even the Government member in charge of the Railway Port-folio, the Hon. Mr. Clark, had to admit that the anomalous rates charged by the Indian Railways were "largely due to *the Indian system of separate*, and in some cases necessarily *competitive, Railway administrations*. Italics are ours.*

The Indian members were so strongly impressed against the working of the Companies that the Hon'ble Sir Ibrahim Rahimtulla put certain questions in the same Council on 17th September 1913, and obtained certain information as to the constitution of the various Railway companies, statistics of Indian Railways, etc.†

On 24th February 1914, the Hon'ble Mr. Vijayaraghavacharya moved the following resolution :—

"That this Council recommends to the Governor-General in Council the appointment of a representative commission for the purpose of investigating the causes and attending circumstances of the late strike on the Madras and Southern Mahratta Railway and other strikes or threatened strikes about the same time, whether in sympathy with it or due to other causes, and generally for the purposes of enquiring into the system of Railway management in India, and for making a report thereon with power and instructions to include in their report, their views and recommendations as to the advantages and disadvantages in public

* Page 282 of the Gazette of India, part VI, dated March 16th 1912.

† Pages 547 to 551, and 580 to 583 of Part VI of the Gazette of India dated 20th September 1913.

interest, of Government management of Indian State Railways and of the development of future Railways by Government itself."

After a lengthy discussion the resolution was lost again, 19 Indian members voting for it, while 33 European officials and the Hon. Sir Ali Imam being against it. It was practically a moral victory in favour of the Indian view. The Indian opinion was unanimous and must have made its impression on the Government also.

On March 24th 1915, Sir Ibrahim Rahimtulla took up the matter and moved a direct resolution that "this Council recommends the Governor-General in Council to consider the desirability of the future policy in regard to State Railways being one of management by Government instead of by Managing Companies." The matter was fully discussed by the Honourable Members of the Council and the Indian view in favour of State management was clearly brought out by the Indian members, and the Hon. Mr. Clark on behalf of Government accepted the resolution, stating that the Government of India had already, with the sanction of the Secretary of State, taken up an enquiry into the matter, especially in regard to the vital question of the comparative economy of the two methods of working. He, however, added that the Government were only considering the question of the relative efficiency of the two systems and in no way committed themselves as to the conclusion which they might eventually form.

The matter has been since fully discussed in the public press and several communications were issued on the subject by the Indian Railway Board. The arguments used by the Indian members in the discussions in the Council were so convincing that the Government could not but accept the resolution. Further enquiry into the relative merits of the State and Company managements was, however, not at all necessary in view of the emphatic decision previously arrived at by the Government of India in the sixties of the last century against the employment of the guaranteed companies. It must be evident to every man

acquainted with the practical working of the Indian Railways that a sound decision as to relative merits of working could not be arrived at upon the statistical data maintained by the Government of India. This was immediately pointed out by this writer in one of the articles (dated 30th May 1915), which appeared in the *Leader* of Allahabad in May and June 1915. The analytical results published annually by the Government of India are mere averages and hardly give anything like the actual results. They are based upon factors which vary according to the different conditions prevailing in the different parts of the country traversed by the different railways.

This was subsequently admitted by the Government of India, as the Railway Board in a Circular dated 10th July 1916 declared that they had "been forced to the conclusion that it is impossible to base any definite finding upon statistical results." This showed the wisdom of the high officials of the Government who instead of coming to a decision at once, have been postponing the matter from time to time. Even after realising the unreliability of the statistical data, they did not come to a conclusion and the Railway Board in the same circular of June 1916 decided to pursue "the matter by an enquiry into the practical side of Railway working founded upon every-day experience of those commercially interested in Railways in order to determine whether State or Company managed lines have rendered the better service to the public," and they addressed the local Governments and certain commercial bodies and associations to be favoured with replies to the following questions :—

"(1) What particular Railway or Railways do your members most frequently have dealings with?

(2) If with both State and company-managed lines, does the experience of your association lead to the belief that the public are better served by one than by the other in—

(a) Promptitude of despatch and delivery,

(b) In rates,

- (c) In the manner of dealing with complaints,
 - (d) In the care and handling of goods,
 - (e) In the matter of passenger traffic?
- (3) If dealings are with one system of railway only, have you complaints to make under any of the sub-heads of question 2 ?”

The public were surprised that the Railway Board thought such an enquiry would solve the question of State versus Company management of Indian State Railways. The enquiry was condemned even by the President of the Indian Railway Conference Association at its annual sitting at Simla, on October 15th 1916, as an enquiry on narrow grounds into a question which according to Major Sir H. A. L. Hepper, R.E., “must be decided on general, political and financial considerations, and not upon the every day experience of those commercially interested.”

Although we do not agree with the general views of this Association, as it is composed entirely of Railway officials most of whom are Agents of the Companies, still we note this as a remarkable opinion showing that the enquiries which the Railway Board was making did not virtually govern the question at issue. We do not understand why in this enquiry, the opinions of the general Indian public, who have a real stake in the matter, were not invited. The following is, however, a summary of the replies received by the Railway Board in 1916-17 :—

The Governments of Bombay and Madras were entirely in favour of State management. The Governor in Council of Bengal noted that the weight of Commercial opinion in that Presidency was in favour of company management ; but his own opinion was rather on the side of State management, provided such management was conducted on up to-date business principles. The Provincial Governments of the United Provinces, the Punjab, Behar and Orissa, Burma, Central Provinces, Assam, Rajputana and Central India favoured the arrangement of both the State and company systems being allowed to continue with certain improvements which they suggested.

Among the commercial bodies consulted, the opinions were similarly divided. Those in favour of State management were :—

1. The Indian Merchants' Association, Bombay.
2. The Mill-owners' Association, Bombay.
3. The Hon'ble Rao Bahadur R. N. Mudholkar, C.I.E., of Amraoti.
4. The Bengal National Chamber of Commerce.
5. The Darjeeling Planters' Association.
6. The Southern India Chamber of Commerce, Madras.
7. The Karachi Chamber of Commerce.
8. The U. P. Chamber of Commerce, Cawnpore.

The opinions of these bodies were supported by weighty arguments which deserved consideration. The European commercial bodies, which favoured the company system, were more in number but their views were not supported by equally strong arguments. Their number should not count for much, against the overwhelming majority of the Indian general public, whose opinions were not similarly invited but who have expressed themselves in the Indian Press. Even the strongest advocates of the Company system condemned some of the ways of company working which have existed for all these 68 years and need effectual remedies.

His Excellency Lord Willingdon supported by the Hon'ble Sir M. B. Chabul and partly by the Hon'ble Mr. G. S. Curtis, C. S. I., was entirely in favour of all main railways in India being owned and controlled by the State for the following reasons :—

(a) that as the State owns 9-10ths of the capital in these railways, it is but proper that the State should administer them ;

(b) that it is absolutely wrong that railways in India should be controlled by Boards of Directors located in London, drawing considerable fees, and that if Company management is to continue, the Boards of Directors should be located in India, where the directors would be able to take a practical interest in the

particular railway they control, though, as already observed, His Excellency the Governor would do away with Company management altogether;

(c) that under State management the opening up of the country by means of light railways would be more rapidly and effectively carried out, and the possibility of constructing feeder lines would be an easier process than under the present system, for there is no doubt that the great private companies on this (Bombay) side of India do put difficulties in the way of these ventures;

(d) that State control in a vast developing country like India is more suitable than Company control because the State will be inclined not to look so much to immediate profits for shareholders as to the satisfactory development of the various parts of this continent.

The Government of Madras stated that overcrowding of third class passengers especially during times of festivals, inadequate provision for their convenience and comfort at stations and the shortage of wagons, were the chief complaints that were usually brought against the Railway Administrations in Madras, which are all managed and worked by Companies. Judging from the Pilgrim Committee's Report, they added, "the Madras and Southern Mahratta Railway Company appears to be the worst offender in the matter of third class passengers." The Joint Secretary to the Government of Bombay stated "that 20 years ago the Companies' lines in that Presidency were far in advance of State Railways but with the improvement in the finances of India, there has been a very great advance in North-Western (State-Managed) Railway during the last twenty years and that this railway now need not fear comparison with any company line." The Government of Bombay added that from the views expressed by Government District officials, there appeared to be good grounds for the impression that the Railway Companies were not responsive to representations regarding agricultural interests. As regards the question of passenger accommodation and the many vexed questions arising therefrom

and other matters affecting the comfort and convenience of the travelling public, complaints were constantly being received, by the Government of Bombay. This was a fit answer to the Lieutenant-Governor of the Punjab, who was under the impression that a company would be more receptive of new ideas and more sympathetic to suggestions for improvements of conditions of passengers and goods traffic than the State management of the N. W. Railway.

The Bengal Chamber of Commerce would offer the strongest opposition to any proposal for a change in the direction of State management. They quoted the authority of Lord Dalhousie's minute of 1853 in favour of the employment of the old Guaranteed Railway Companies, which have been universally condemned and extinguished. While the more weighty opinion of Lord Lawrence, approved in the Secretary of State's Despatch No. 42 of July 15th 1869, (see page 252 *supra*) in favour of State management, stands unchallenged to this day. The re-employment of companies from 1879 was in a way due to the abnormal financial stress brought upon the Government of India by the famines of 1874-77 and the Afghan War of 1878-79. Fortunately those circumstances have passed away and we are now in a better position to judge the merits of the policy, which was adopted in 1884 without consulting Indian opinion in the least. The Bengal Chamber of Commerce, who pose so bravely in shaping the Railway Policy of Government, did not risk a single pie in the shape of unaided private enterprise in Railway extension in India, the burden of which has been borne by the people of this country, whose wishes this Chamber and others of its type desire to ignore. In para. 12 of their reply, the Chamber quoted the opinion of the Mackay Finance Committee of 1907 but they ignored again that that Committee also had neither any Indian in its body nor did it care to consult Indian opinion on the matter. Its remarks were greatly influenced by the representatives of the Railway Companies. The Chamber did not desire any enlargement of the existing bureaucracy of

Government servants. But do not the servants of the Indian Railway Companies form a similar bureaucracy? We see no difference whatever between the two. They have the same offices, the same system of working, the same procedure and much the same working rules and regulations, and in practice the servants of Companies exercise the same attitude of authority over the public as the Government bureaucrats do.

The Lieut-Governor of Behar and Orissa feared that the extension of State management would result in over-centralisation and over-departmentalism, and that the elimination thereby of the competitive element would be a distinct bar to progress. The former can be effectively avoided by provincializing the railways, *i.e.*, by placing them under the Provincial Governments, where control might be exercised by a Select Committee of the Legislative Council as suggested in page 113 *supra*. The nominally competitive element is at present productive of many evils as well as benefits, while the State management conducted on up-to-date lines would remove those evils and secure all the benefits. This also disposes of the objection that the composite system of State and Company management creates the greatest amount of healthy competition and that the sole management by the State would create a large monopoly which would curtail healthy competition to the detriment of trade. In Section 4, Chapter VII, it has been shown that the competition between railway administrations in India has practically ceased and can never last very long. The introduction of the proposed change would remove also the objection of the Punjab Government, that "State managed system, however admirable its organisation, was inevitably less amenable to public or outside representative opinion than one managed by a Company." Sir Benjamin Robertson was totally wrong in his remark that constant direct political pressure on the part of the public or of individual interests in regard to the complicated and delicate details of Railway administration would be "inexpedient and might result in the undue predominance of the interests of race, class or individual."

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Some of the replies referred to the tendency of State management to lavish expenditure owing to absence of personal interest to observe strict economy. This is more imaginary than real. The statistical data and opinions of competent experts emphatically deny this charge against the State management, see Sections 3 & 4 of this Chapter. So far as personal interest is concerned, officials of both the State and the Companies have equal interest, because if the Railway did not give good results, their bonus from the Provident Fund would be small. As a matter of fact both the systems are conducted on the same lines. If there is more economy in one than in the other, it is in the State management, where salaries of higher officials have been more moderate than on the lines worked by the Agency companies.

The Punjab Government referred to some dis-advantages in having the great number of Railway employees as State servants. The Bombay Chamber of Commerce also stated "that the control of the large body of men who would become State servants under a system of State management of Railways would be difficult and the political influence of such a body might operate undesirably." If on the introduction of democratic institutions, railway servants may be vested with the power of vote, we do not think as a body they would exercise that vote in an undesirable direction. If they did this, who would suffer? The electors themselves no doubt, and matters in the end would be set right as they are in the European countries where State management has produced excellent results, see section 5 of this Chapter.

It was further claimed that the members of companies' staff by their continuous service on the same Railway become identified with their own line, and are more efficient than where individual members are subject to frequent transfer. Hardly a member of the staff whether on a company's line or on that of Government remains in the same position for all the time. Promotions and transfers even on the Companies' lines shift an officer from one office or place to another. Sometimes it is a decided advantage

to change an officer who has been long in one office. Where there may be a marked advantage, it is as much practicable in Government administration as in a Company's to keep an officer on the same Railway.

It is remarkable that the European commercial bodies, both in India and in England, are from the earliest times, great advocates of Company Management, but none of them has taken any risk whatever on account of the Indian Railways. Even capitalists of England have failed to invest their money in Indian Railways *as an unaided private enterprise*. They have always insisted upon a Government guarantee of high interest. The European Commercial Bodies who offer gratuitous advice in favour of employing private Companies secure undue advantages from the British Companies at the expense of Indians and have enjoyed all facilities provided by the Railways to push on their trade. It is the people of India who have borne all the burden and they alone should decide the great question now at issue.

As a remedy for the mismanagement of the Companies' lines, suggestions were made from several quarters to shift the Boards of Directors from London to India. H. H. the Lieutenant-Governor of the United Provinces was distinctly of opinion "that the domicile of future railway administrations should unquestionably be in India rather than abroad." The Hon'ble the agent to Governor-General for Rajputana thought that the disadvantage of Boards of Directors being in London might be minimised by vesting more authority in the local Agents of the Companies. The Chief Commissioner of the Central Provinces however, noted that the removal of the Directorates from London to India would affect the confidence of the public in England to whom India must look for the capital required for railway development. This was contradicted by Sir James Meston's Government, who were of opinion that after the war for some considerable number of years, the import of English capital for railways would be restricted. We are totally against importing any further capital from abroad for railway purposes.

His Honour the Lieutenant-Governor of Behar and Orissa very rightly remarked that "the Control exercised by the Railway Board over the company-managed lines, should be more effective than is the case at present. The Government should have wide powers to fix rates and remedy legitimate grievances and defects brought to their notice, and that powers "should be freely exercised." "Control" continued that authority, "covers many complicated issues of routing and general policy. The present measure of control, as for example, the scales of maximum and minimum rates is apparently inadequate to regulate such matters as unfair block-rates, competition between private Companies for spheres of influence more particularly where the interests of great ports compete with those of inland provinces."

The system of leasing Indian State railways to private companies virtually amounts to this, that the people of India defray the costs and expenses of building up the property, while the profits and other advantages of ownership are shared and reaped away by others. In the early days of these railways when the traffic returns were low and did not pay the expenses, interest and other charges, the people of India defrayed all the deficits. When the time came for profits, the companies have stepped in and got hold of the railways, practically becoming masters of the same, sharing in the surplus profits, and exercising powers over large expenditure and lucrative appointments, keeping Indians down in the lowest grades of the service.

On the 7th March 1917, the Hon'ble Sir Robert Gillan, in replying on behalf of the Government to the Hon'ble Sir Ibrahim Rahimtulla's question in the Council, said that the only country in which so far as the Government were aware, the Railways owned by the State were leased to companies was Holland.

According to Parliamentary Return No. 287, dated 12th August 1913 of "State Railways (British Possessions and Foreign Countries)," in Austria, Hungary, Belgium, Denmark, France and Norway not only did the State work, all the state-owned railways but also a good proportion of privately-owned lines;

while in Argentine Republic, Brazil, Chile, China, Egypt, France, Germany, Italy, Japan, Portugal, Roumania, Russia, Finland, Servia, Sweden, Switzerland, Turkey, Australia, New Zealand and South Africa, *the State worked all the State-owned railways*. Out of 2,120 miles of State-owned railways in Canada, the State worked 2,018 miles. In the United States of America and Spain all the railways were privately owned and operated. Many of the other countries had large mileages of privately owned and operated lines as well as State owned and operated. The only countries where State owned railways were operated privately were Brazil, Mexico and Netherlands. For India we advocate State management for *State owned railways especially*. We have no objection to Companies working such lines as they construct on their own risk and responsibility, for in this case they will not incur wasteful expenditure as they do at present with public money in India. We make this allowance for private enterprise, though in principle we hold that the State should own and work *all* railways.

It is necessary to note that there is a wide difference between the Company management which obtains largely in the United Kingdom and the United States of America and the so-called Company management in India. In the United Kingdom as well as in America, the Railways are owned by the Companies and managed by them at their own cost and financial risk, which compels them for their self-interest to manage the Railways economically and with satisfaction to the public in order to attract traffic, which, if one Company did not provide decent accommodation and ever increasing facilities and comforts, would go to the rival routes, of which there are many. There the competition is healthy and beneficial to the public. Here in India, the Company management is nominal and has no risk or responsibility for financial results. It has large powers, and very little or no control or competition. Private interest might induce Companies generally to exert themselves more than any State Control, but here the Government either finds the

capital or guarantees the interest, defrays the costs of working and highly-paid establishments, *all out of the public Treasury*. Traffic is overflowing and the Railway administrations hardly take steps to foster or canvass for it. They manage the Railways indifferently and spend money like water, because the payers have no Control over the Railways. Indians have been crying aloud for half a century for decent accommodation, necessary comforts and adequate number of trains but their appeals have not received a satisfactory response. The administration of the railways will not be satisfactory unless and until it is placed under the control of the representatives of the people.

At the meeting of the Indian Legislative Council at Simla on 25th September 1917, the Hon'ble Sir Ibrahim Reheemtulla moved another resolution recommending to the Governor-General in Council to give the required notice to the Managing Company of the East Indian Railway, in accordance with the terms of the existing contract, but withheld the latter part of the Resolution to the effect that the State should take up the working of the railway, till the meeting of the Council in Delhi in 1918. In his reply on behalf of the Government, Sir George Barnes said that whatever might be the future of the E. I. Railway, notice should be given and the Secretary of State had already intimated his intention to the Government of India to give the necessary notice during 1917.

The Hon'ble Mr. M. A. Jinnah also moved for the appointment of a mixed Committee to examine the working of the Indian Railways Act. He drew attention to the following points :—

1. Why did the Indian Railways Act of 1890 not follow the principles of the English Act of 1888 ?
2. Need for a permanent Railway Commission as suggested by Mr. Thomas Robertson, C. V. O.
3. Statutory powers for the Government of India to control the Railways.

4. Joint Enquiries into accidents, advocating the creation of a "Panch" of non-officials to co-operate in the Joint Enquiries.

On the 18th March 1918, the Hon'ble Rao Bahadur B. N. Sarma moved the following resolution:—"This Council recommends to the Governor-General in Council that the contract with the East Indian Railway Company be determined by the 31st December 1919, and that the State do take over the management of that railway system on and from that date."

This resolution was moved on these main grounds:—

- (i) Financial economy,
- (ii) That it would be conducive to improving the general and industrial resources of the country, and
- (iii) That the railway management would be made really more effective and economical and beneficial to the general tax-payer.

The Hon'ble Member clearly showed the evils of the company system in various aspects, pointing out that the companies were really being managed by retired officials of the Government of India who after taking pensions had joined the Boards of Directors in London. He asked whether it would not have been possible for the Government, at a much cheaper cost, to have provided a managing agency if it was necessary to run these railway systems on such a basis, and whether it was necessary to forego such a huge share of the railway profits for the benefit of these companies which, he contended, did very little effective work in the shape of management.

Sir George Barnes, on behalf of the Government, explained that the question was under correspondence between the Government of India and the Secretary of State, stating that the notice to determine the company's contract on the 31st December 1919 had been duly given to the company. He added there seemed to be three alternative methods of dealing with the E. I. Ry. viz:—

- (i) State Management;

- (ii) Continuance of the present management by the company domiciled in England but subject to large decrease in the share of profits taken by the annuitants;
- (iii) Management by a Commercial company domiciled in India with rupee capital and a mixed Board of Europeans and Indians.

and left these three alternatives for members of the council to choose any one of them. The debate was continued, every one of the Indian members supporting the motion for State management, with the exception of the Hon'ble Sir Dinshaw Wacha whose attitude towards this question was totally unintelligible. He, however, joined the Hon'ble Sir Hugh Bray in defending the Company Management. The Hon'ble Madan Mohan Malaviya with his irrefutable arguments strengthened the motion for State Management and after a lively debate the resolution was withdrawn pending the decision of the Secretary of State.* This was a serious mistake on the part of the Hon'ble Mover. The Secretary of State took advantage of it and appointed the Acworth Committee in 1920, instead of acting upon the expressed wishes of the Indian members of the council.

Referring to the last debate some Anglo-Indian writers remarked that the argument of the Indian representatives, that there was no danger of political pressure being applied in India to Railway administration, was contradicted by their urging the fact that the Railways under State management would be more amenable to the demands of the public and would certainly give a much larger number of highly paid posts to Indians. In showing this apparent inconsistency in the demands of the Indian leaders, the critics evidently forget that these two claims are made entirely upon grounds of justice to Indians, which has in the past been flouted by the British Companies entrusted with the management of the Indian Railways. Danger might come in where undue advantage is sought, but no such demand has ever been made on behalf of the Indian Railway servants.

* Pages 639-663 of the Gazette of India, Part VI, March 30th, 1918.

What the Indian representatives disclaim is political pressure for undue gains. But undue gains are not at all in their minds, when they ask for humane treatment of Indians on the State Railways, or for their legitimate share in the higher appointments which are at present disposed of by the Boards of Directors in London, deliberately excluding pure Indians from them and denying them the requisite training for higher mechanical work which they ought to have freely received for the fact that the Railways belong to the Indian people themselves. The Railway companies, though in the position of servants, have become masters of the property and treat Indians as foreigners, denying them proper comforts and conveniences in travelling, and disallowing their children their legitimate share in the administration of their own property. The securing of justice to Indians in such matters should need no political pressure. Indian claims are based upon the solid ground of justice and fair play alone.

The enquiries made by the Indian Railway Board in 1916 were very narrow and gave but meagre information on the large issue involved. The question is one of vital importance to India, as upon the adoption of a sound Railway policy depend the economic growth of the country and the well-being of the \$19,000,000 of the Indian population. A body like the Indian Railway Board composed of the greatest Railwaymen in India should have approached the question with a due regard to interests of India, on—

- (1) Broad principles of general application,
- (2) The experience already gained by India itself with the Railway Companies, and
- (3) The general practice of other nations.

Accordingly we propose to deal with the matter upon these three bases.

SECTION 2.—General Principles.

The Government of India have been trying to find out—

- (1) the relative cost of working of the two systems, and
- (2) efficiency of the service rendered by them.

Both these points are very important and deserve serious consideration.

"The Railway Board admit that it is impossible to base any definite finding upon statistical results," see page 480. Under the conditions prevailing in India, it is impossible to prove from figures alone which system is more economical or more efficient. We have therefore to judge the merits upon indisputable points. Let us therefore assume that both the agencies possess an equally competent staff, use the same amount of skill, and spend the same amount of money on stores upon the working and maintenance of their undertakings. It is generally admitted that both agencies in India are almost alike in these respects. Then where is the difference between them? We find it in the following cases:—

- (1) Salaries of higher officials,
- (2) Disposal of surplus profits,
- (3) Treatment of Indians,
- (4) General policy.

In all these respects, Government management is more economical, fair to the people of India, and better for the country.

In the matter of railway working there are two main items under which railway expenses may be divided, *viz.*, Stores and Labour including establishment. In the case of Stores required for working a railway, there should be no difference in cost if the Stores be purchased under proper arrangements and under the control of a *committee* of experts as suggested at page 118. As regards labour and Establishment charges, we refer to page 309 and give below a few glaring instances which show that the State agency is more economical. The following are the latest rates of monthly salaries on the premier State-worked railway, and on state railways worked by two typical companies:—

	<i>N.W. Ry.</i>	<i>G.I.P. Ry.</i>	<i>Co. E.I. Ry. Co.</i>
	Rs.	Rs.	Rs.
Agent ...	3,000	3,500	4,000
Chief Engineer ...	2,500	2,500	2,500

	<i>N.W. Ry.</i>	<i>G.I.P. Ry. Co.</i>	<i>E.I. Ry. Co.</i>
	Rs.	Rs.	Rs.
Traffic Manager...	... 2,000	2,500	2,500
Loco. Supdt. ...	... 2,500	2,500	2,500
Carr. & Wag. Supdt.	... 1,750	2,300	2,000
Chief Storekeeper	... 1,508	1,850	2,000
Chief Auditor	Not shown	2,500	2,500
	miles.	miles.	miles.
Open mileage in 1918	5,226	3,229	2,775

From these rates of salaries and the extent of railway lines, we can very well form an idea of their comparative economy. Although the North-Western Railway was greater in length by about 59 per cent. in one case and by 88 per cent. in the other, yet the rates of its salaries were generally lower than those of the companies' lines. It may be noted that the salaries and other expenses incurred by the companies go all the same from the State treasury, and the increased rates allowed by the companies fall entirely upon the State and add to the cost of administration, the companies having no money of their own to spend on these expenses. The employment of the Companies is responsible for the rises in the rates of salaries of the higher officials on the State Railways worked by the State also as shown at page 150 supra.

Besides the larger sums spent on the salaries of the higher officials, the State has to give away a share of the railway profits to the Companies. These surplus profits paid to the companies during the last 6 years were as follows:—

	Rs.
1914-15	1,62,86,000
1915-16	90,57,411
1916-17	1,15,56,624
1917-18	1,49,16,062
1918-19	1,89,63,551
1919-20	2,00,92,140

Let us now see what the experts, who spent their lives on the Indian railways, say. The late General Richard Strachey, the late Col. Conway-Gordon, Sir Guilford Molesworth, Col.

Boughey, among others whose opinions we have quoted elsewhere, have expressed themselves decidedly in favour of State management in India.

In the matter of raising funds for capital outlay on railways, it is universally admitted that governments obtain the funds on more favourable terms than companies do.

So far as the Indian railways are concerned, we have not come across any evidence showing that the company management is more economical or that it has rendered better service to the public. If there is any body now that makes such a claim, we should ask him to show where the economy or efficiency lies. We cannot accept assertions on general results, which, as we have shown (see pages 275 and Section 5 of this Chapter), are due to other causes such as natural advantages of locality, abundance of traffic, etc.

The foregoing figures and explanations dispose of the question of respective economy of the two systems. The advocates of the Companies, however, support them on commercial grounds but they ignore the broad fact that the Agency Companies of India are seriously wanting in the first essential of commercial enterprise, namely risk and responsibility for any loss. For lack of this vital condition, the managements of these companies are extravagant.

As regards the general question of application of commercial principles in working in India, we would invite attention to the following observations made by Mr. G. W. MacGeorge, M.I.C.E., late Consulting Engineer to the Government of India for Railways:—

“However trite and obvious, it cannot be too often recollected that under purely commercial management it pays a little better to carry one unit for, say, eight annas than to carry seven units for seven annas, that is to say for the sake of one anna of additional profits a railway company is *bound* in the interest of its shareholders to exclude what may possibly be a very large proportion of public advantage.....The shareholders of a Com-

pany do not make a railway for the purpose of conferring a maximum public benefit, but only for securing a maximum revenue.....In India the State occupying a materially different position, will not necessarily, be bound to sacrifice great public benefits for the sake of the last anna of profits. Its future direct revenue from railways will form but a part of the whole receipts by which the Government of the country is carried on, and the reduction of a $\frac{1}{4}$ or even $\frac{1}{2}$ per cent. on its railway income, due to a largely lowered tariff, might conceivably confer a stimulus to public activity and industry which would set in motion a more than equivalent flow of revenue from other sources, or the public, paying only the same total, will secure an important reduction in the direct cost of railway transit."†

One of the grounds, upon which the employment of the British Companies was recommended by the Select Committee of 1884, was that the emulation between *quasi* private enterprise and Government working tends to promote economical construction and management. At pages 460—461, we have already shown that competition between the Indian railways has resulted in agreements for pooling and division of traffic between the competing lines. On this subject we quote once more the opinion of Mr. G. W. MacGeorge:—

"Under the practical conditions of railway working, too great importance is very often attached to the public benefits derived from what is called healthy competition.

"Reasonable competition has no doubt some very desirable results; it prevents stagnation, and enforces those scientific developments which tend to reduction of working expenses and railway rates, but in practice, as a matter of notoriety, independent railway companies are soon compelled to combine in self-defence against undue loss on their part from competition, until practically a single large monopoly is maintained, and this is liable to become a specially adverse monopoly, where, as in the case of India, a large portion of the working and management is

† Pages 10-11 of "Ways and Works in India" 1894.

carried on from a distant country. Whoever holds the railways must of necessity hold a virtual monopoly, and *it is distinctly better*, perhaps everywhere, but certainly in India, *that such a monopoly should be in the hands of the State than in those of private persons*. The State, moreover, has it in its power to bestow on the public, to a far greater degree than private companies could do, the maximum advantages which the railways afford by means of the lowest tariffs."*

The italics are ours. Both managements profess to be working on commercial principles, but the companies as stated above lack in risk which always attaches to commercial enterprises. This is difference number one. Difference number two is in the constitutions of the two managements: the State management represents and works for the *whole Indian nation*, whereas the joint-stock companies work for their shareholders only, who are *mostly non-Indians*.

Difference number three lies in the treatment of the general public and the railway servants. Government management has fair rules and regulations, allowing even privileges to all classes of people and servants; the companies' ways of dealing are indicated in General Strachey's answers quoted at pages 310-11 and in Section 4 of this Chapter; in daily practice the companies over liberally treat their higher officials and unduly keep down their subordinates, leaving the latter at the mercy of the former. The subordinates have unfortunately to fight for their dues and privileges against the combination of their superiors, who take away an unduly large slice off the railway income. On the State Railways in India workers have not to fight so much against Capital as they have to struggle against the lion's share taken by those in authority, leaving so much less for the subordinates.

The disadvantages of Company management of the Indian State Railways may be summed up as follows:—

* Pages 9—10 of "Ways and Works in India" by G. W. MacGeorge, 1894.

Firstly.—The State management is amenable to the Government of India in India, which can be influenced by the representatives of the people; while the companies' managements are directed by their Boards sitting in London, who are not in touch with the people, nor can they be influenced except where bound by the express terms of their contracts.

Even in their dealings with Governments in India, the Companies' officers evade responsibility by an appeal to their Board of Directors who correspond direct with the Secretary of State in London as stated in paragraph 5 of letter No. 67—673 R., dated 7th February 1917 from the Government of the United Provinces. The Government of India, in their despatch No. 28 of 22nd March 1869 to the Secretary of State, wrote that their decisions were not accepted as final in India but were habitually referred to the Board of Directors in London.*

Secondly.—The State management naturally works in the interests of the public, while company management aims at profits only and overlooks the general interests of the public and the development of the country. Companies' interests generally conflict with those of the public, see pages 335-336 *supra*. Large concerns like railways are made up of large sums of capital and necessarily lead to evils of capitalism, unless the concerns are nationalised. The State Railways in India are already nationalised but the interpolation of the companies for their working is a reverse step and should be eliminated.

Thirdly.—Treatment of Indian passengers and traders is generally better on State-managed than on company-worked lines.

Fourthly.—As a matter of fact, State-management is cheaper than that of the companies. Take, for instance, the salaries of higher officials, which are higher on the Companies' managements than on the Government lines. As the Companies are not owners of the Railways and spend large sums of money out of the Government Treasury, they have not the same incentive to economy as if they were spending it out of their own resources.

* Page 98 of Railway Policy in India" by H. Ball.

Fifthly.—Profits made by the State are entirely used for the public benefit or towards the reduction of taxation; while the profits made by the companies go to the share-holders of the companies.

Sixthly.—Government have a large field and employ a much larger number of expert officials than the individual companies, and are therefore in a position to obtain the best men on better terms than the companies do. As a matter of fact companies often draw their officers from the Government service by offering them tempting emoluments.

Seventhly.—In the matter of raising funds, Government can obtain loans on cheaper terms than the companies, see expert opinions at pages 311-17 and in the following Sections of this Chapter.

Eighthly.—Government management is impartial in the employment of its servants as in the public services; companies' managements are partial to Europeans to the detriment of the children of the soil.

Ninthly.—Divided interests, created in a single concern by the employment of different companies for the working of the State Railways, are responsible for the following mismanagements which involve large amount of extra expenditure and serious inconvenience to the public:—

(a) Complicated tariffs of Rates and Fares which the Government of India have been trying to get simplified for the last 40 years or more but have failed on account of opposition of the Companies. see pages 450-54. The puzzling tariffs and differences in the general classification of goods on the different Railways lead to overcharges and under charges against merchants and general public, resulting in serious delays, annoyance, extra expense, and correspondence in the settlement of claims on account thereof.

(b) Anomalous rates for goods charged in numerous cases which are detrimental to the development of Indian industries and benefit of the public generally, see pages 449-57 and 478.

(c) Difficulties experienced in the provision of carriage

and wagon stock on occasions of large fairs and rush of goods traffic on one Railway, while stock might be lying idle on other lines, see complaints at pages 74, 77, 78.

(d) Longer haulage of goods by circuitous routes created by competition between different administrations, where the traffic would be carried by the (shortest) direct route if the working of all State Railways were in the hands of the State.

Tenthly.—Unreasonableness of companies in their dealings with Government representing the public, as shown by evidence at pages 227-28, 334-44, 352-54, 357-58, and Section 3 of this Chapter.

There would be the following advantages if all State Railways were managed by the State:—

(a) The Railways would be managed as one concern upon uniform principles instead of as different undertakings under different administrations with divided and conflicting interests as at present.

(b) There would be one simple tariff of rates and fares and uniform classification of goods on all State Railways, removing all the puzzling complications which nobody seems to understand at present. It would remove also the block-rates at present quoted by one administration against routes served by other administrations, and tend to greater economical and industrial development of the country, bringing prosperity and contentment to the people.

(c) All surplus profits which are taken away by the English companies would remain in the State Treasury and reduce taxation.

(d) Working expenses would be greatly reduced as under:—

- (i) Economy in the cost of haulage by direct routing of traffic under uniform mileage or through-scale rates, which is at times carried by circuitous routes.
- (ii) Advantageous concentration of surplus rolling stock for occasions of fairs and rush of goods traffic, thereby reducing capital cost on extra

carriages and wagons provided for separate administrations.

- (iii) Reduction of salaries of higher officials, and London Board expenses.
- (iv) Greater employment of Indians in the superior grades, see pages 154-58.
- (v) Abolition of the hire system for rolling-stock interchanged between the separate administrations.

(e) Help to industries by placing large orders for Railway requirements in the hands of Indian manufacturers, instead of obtaining them from foreign countries, as recommended by the Indian Industrial Commission 1918.

(f) Administration of railways as part of the machinery for the general development of the country.

(g) Finally State management when reformed would provide better accommodation in carriages and waiting rooms, proper arrangements for Indian refreshments, larger number of trains to avoid over-crowding of passengers and detentions at present caused to passengers at stations, and would on the whole give better service to the public all round.

The first and foremost consideration is that the State must work for the people, while a private company aims at the profits of its individual shareholders. This consideration alone places the State Management in a position superior to that of private companies. In the administration of Indian State Railways, the companies are a third party, between the Government on one side and the people on the other. The employment of such a third party cannot but involve an extra expenditure. These two considerations alone show that the companies' management is not, and cannot be, more economical than that of the State. Even the advocates of the companies admit this, see pages 311-17 and the following Sections of this Chapter.

SECTION 3.—Opinions of Experts.

The advantages and disadvantages of the two agencies were very plainly and accurately described by Major L. Conway-Gordon, R.E., before the Select Committee of the House of Commons in 1884. There are two main operations in connection with railways, *viz.*—(1) Construction, and (2) Working and management. The opinions of the witness were taken separately on these two operations by the Select Committee. The questions put by members of the Committee and the answers given by that officer who held at the time the position of the Director General of Indian Railways, are given below:—

“4293. Will you kindly state to the Committee what are the comparative advantages of railway construction by companies? Guarding myself again, by stating that what follows is simply my own personal opinion, there appear to me to be two advantages from constructing railways by companies, first, directly the contract with the company is signed, the Government is pledged to the expenditure, there can be therefore no alteration in the policy thereafter, the railway is made, no matter what may be the state of Government finances at the time or subsequently. Secondly, that the capital sunk by companies in the construction of railways does not appear * in the accounts of the empire as part of the State debt. Those are the only two advantages that I can see in the construction of railways by private companies.”

“4294. What are the corresponding disadvantages, if any?—First, that the control exercised over their servants by a Board of Directors in London is not sufficiently close and immediate to secure good results; Secondly, that in the case of a guaranteed company, as the share-holders are secure in any event of their interest at the normal rate, there is no sufficient inducement to economical construction; Thirdly, that companies will be ready to take up only such lines as will yield for certain, a direct profit, and that this will prevent Government from

* This does not apply to Agency Companies.

making additional feeder lines for the further development of the country, because the indirect returns of the feeders will go, not to the Government but to the Company; Fourthly that the dual control, absolutely essential where Government has to supervise the expenditure of what is practically its own money, leads to unnecessary friction and delay; Fifthly, that as far as our experience goes, almost whole of the capital furnished by companies comes from England, while on the other hand, part, at least, of the State Railway Capital is raised in India; the construction by Companies must therefore, by increasing remittances to the extent of the difference, tend to lower exchange; and Sixthly, a disadvantage which has been brought forward by the Government of India at different times is, that the Government possesses too little control over the actions of the officers of private Companies, and that this want of control, might lead to political complications where Railways have to be made through the territories of Native States. These are all the disadvantages that I have to mention in regard to the construction of railways by private Companies."

"4296. Will you next tell the Committee what are the advantages of the Government making the railroads themselves?—First that the Government can raise the money required at a cheaper rate than any guaranteed company, however influential; Secondly, that Government by having a larger selection, and by its more immediate and effectual control over its servants, should be able to construct railways more economically than Guaranteed companies; Thirdly, that in the case of railways carried through the territories of Native States, there is less danger of political complications when the whole arrangements are in the hands of the Government. Those are all the advantages I can find on that head."

"4298. Will you state whether there are any disadvantages in direct State construction?—First that there is no continuity of policy on the part of Government, that what one Government introduces the next too often upsets; Secondly that there is no

certainty when a railway is once begun that funds will be made available for pushing on the work as fast as possible to completion; and, Thirdly, that there are political disadvantages in increasing the aggregate amount of the State debt. That although there is no real distinction between the two, the money market looks quite differently on a State loan, and on capital raised by a Company for railway construction, although that capital may have been guaranteed by the State."

Question 4299. "Will you now give the committee your opinion regarding the disadvantages of having the Indian railways worked by commercial companies?"

Answer.—"First, that the object of a private company will naturally be to develop a dividend; that as long as the maximum dividend be secured, the company will be indifferent as to whether that dividend is derived from a small traffic at high rates or a large traffic at low rates; Secondly, that it may often be the true interest of a company as a dividend-seeking concern, to charge such high rates as may be sufficient to contract the export trade in some particular article of produce, or such rates for the carriage of coal as may tend to strangle the industries in other provinces; Thirdly, that the desire to secure a good dividend, on all occasions, naturally tends to make the servants of private companies very cautious in trying experiments towards reducing rates and fares; Fourthly, that every rupee taken out of the country by an English Company, in excess of the normal rate of interest on the State debt, constitutes practically a direct tax on transit which must, of course, have its effect on checking the export and import trade, and on the general development of the country; Fifthly, that where a company is given a fixed guarantee of interest, as long as the net profits of the line are not in excess of the guaranteed rate of interest, there is no incentive toward economical working. These are all disadvantages."

Question 4300.—"In your opinion has India practically suffered from those disadvantages?"

Answer.—"I think it has, on the second and last certainly."

Question 4301.—“What are the advantages gained to the public by the State working the railways?”

Answer.—“I think that the advantages of State working are:—First, that it may often be to the advantages of the country, as a whole, for Government to lower a rate, and to work at the lowest possible margin of profit, thus accepting a slight fall in the railway receipts, in order to secure an advantage in some other respect, either to encourage the export trade in some particular staple, or to foster some new industry; Secondly, that it is to the advantage of every country, and particularly of India, that the railways should be worked so that they may pay no more than their working expenses, including interest at the normal rate on their capital, all additional profit being nothing more than a direct tax on transit; Thirdly, that Government has a larger selection of officers to choose from, all of whom are more or less acquainted with the customs, the habits and the language of the country, and that when the supply of these officers fails, Government can avail itself of the services of precisely the same staff as is available to private companies, and at lower rates of salaries; Fourthly, that, generally speaking, the State has in the working of railways all the advantages over private companies that may be claimed for working on a large instead of on a small scale. These appear to be the advantages gained to the public by the State working the railways.”

“4302.—Now will you tell us the disadvantages in the State working of the railways?—

There are very few disadvantages in the State working; I think there are some slight disadvantages in the railway staff being bound by the hard-and-fast rules of the Financial Codes, intended primarily for a service on an entirely different footing. Secondly there are disadvantages in the railway servants being directly under the Government, and this, rightly or wrongly, produces in the mind of public a feeling that the Government will support their officers under all circumstances as far as the facts will admit.”

"4303. Then, on the whole, which agency do you consider the more advisable?—As regards construction, I do not think there is much difference, provided the rate of guarantee is somewhat below the normal rate of interest. It depends more on the men employed than on the system. But as regards working I think the advantages to the public are slightly in favour of the State, owing to the Companies working to develop a dividend and not to develop the country. I think, *if you could get any popular or representative system of Railway administration devised*, it would be better for the country to have State, rather than private enterprise railways; even were there a doubt upon the point, I think it would be advisable for Government to retain in its own hands, to a considerable extent, a monopoly of such importance to the development of India as a carrying trade of the country. The rivalry and competition between the two agencies, State and private enterprise, stimulates the efforts of both."

"4370. Do you not think that the general balance of your evidence has been decidedly in favour of State management as distinguished from trusting the railways to private Companies?—If you ask me this point directly, I may say that *all monopolies like Railways are better in the hands of the public*; that is to say in the hands of the Government, than in the hands of the commercial Companies."

The italics in the preceding para. are ours. So far as the working of the Indian State Railways is concerned, the opinions of Major Conway-Gordon R. E. are as true to-day as they were in 1884. Sir Guilford L. Molesworth K. C. I. E., who held the appointment of the Consulting Engineer to the Government of India for State Railways and designed the works, engines and vehicle stock, for many years from their commencement and is perhaps the greatest living authority on the subject, read a paper on Indian Railway Policy before the East Indian Association, London, on 17th July 1916, in which he made a very weighty contribution in favour of State Management.

He began by quoting the following passages from a lecture on "The Silver Question" which he had delivered to the Bombay Chamber of Commerce about the year 1886:—

"I have always been a strong and persistent advocate of the policy of keeping railways in the hands of the State; so as to reduce railway rates to the minimum. I have always held that railways should be regarded as instruments of development, not of creating revenue. When Major (now Sir Evelyn) Baring asked my opinion of his scheme of private enterprise,* I condemned it on the ground that the true policy of Government was to make railways subservient to the development of the country, and I pointed out to him that in some cases it might be to the interest of Government to incur a direct loss in railway revenue by low rates of transport, and to recoup that loss indirectly by the increased revenue naturally arising from the improved prosperity of the country, whilst it was manifestly to the interest of a company to reap the largest amount of direct profit from a railway.

"We have not merely opened out new fields of produce but our State Railway Policy has led to a large reduction in railway rates, thus cheapening the cost at the port of shipment. The construction of the Rajputana State Railway, passing as it does through the heart of India, and carrying produce at low rates, gave us, to a certain extent, control over the rates of other railways in India, and led to a general reduction. Unfortunately we have lost this advantage by ceding the railway to a company, whose interest it is to make as much direct profit as possible, regardless of the development of the country, but the rates for carrying wheat long distances have been reduced to less than half of what they were in 1873.

"I consider that the enormous profit of some of the railway companies is a national misfortune, for not only does such profit quit the country, but every rupee thus gained directly militates against our export trade, in placing us at a disadvantage when competing with Russia or America."

* See page 323 *Supra*.

He quoted the following extracts from Lord Lawrence's minute of 1869:—

"The history of actual operations of railway companies in India gives illustrations of management as bad and extravagant as anything that the strongest opponent of Government agency could suggest as likely to result from that system.

"In no single respect can I see that less efficiency is to be secured under direct Government control than under joint-stock companies, having their Boards in London

"My own very decided opinion on this point is that the direct agency of Government would certainly be more economical than that of railway companies."

Proceeding further Sir Guilford said:—

"In 1870 the Government of India deliberately adopted the policy of constructing and working railways by State agency, and this policy succeeded beyond all expectations, amply justifying Lord Lawrence's anticipations, although operations had been hampered by Home Office interference. But in 1881 Parliamentary influence had been exerted in the interest of "private enterprise", unfair and misleading comparisons had been made between State and company management, and Lord Ripon came out to India, as Viceroy, pledged to a reversal of the State Railway policy. It was laid down as an axiom that 'the State should divest itself of the task of working railways,' and although it was admitted that this policy was by no means good for the State in a financial point of view, it was believed that the 'superior fitness of joint-stock companies would so improve the income of the railways as to prevent any important loss of the profits reserved for the State.'

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"This proposition met with universal condemnation from the officials of the Secretariat of the Government of India and Minutes exposing its fallacies were sent in by the Under-Secretary for Railways, by the Accountant-General, and by myself as Consulting Engineer to the Government of India for State Railways.

“The Under-Secretary for Railways asked why the Government should not equally divest itself of the control of Telegraphs, Post Office, and Irrigation. He pointed out that, holding the Rajputana line as a State Railway, the Government controlled two-thirds of the districts between Bombay and Northern India, and was thus enabled to enforce a policy of low rates to the port of shipment. He showed that the arguments that had been opposed to State control were based on a condition of things that had long since passed away: that the Rajputana Railway was better managed than many of the companies' railways and that if the Home authorities were as intimately acquainted with the management of companies as the Indian railway officials, the Secretary of State would be less desirous of uprooting one that had proved itself efficient.”

As Consulting, Engineer to the Government of India at that time, he himself wrote a very strong minute against the employment of private companies. In the course of that minute, he made the following remarks on the comparisons of the two systems:—

“Most of the comparisons that have been made between Guaranteed and State Railway management have been very unfair and misleading. The Guaranteed Railways, having occupied all the main and best thoroughfares of traffic in India, must, as a rule, have more traffic than the State Railways, and it follows that, the larger the traffic, the more economically it can be worked. They have now been established for many years, and have by degrees become settled in their working; whilst the State Railways have not had time either to settle down or to develop their traffic; and the Government have frequently been forced to open the State Railways in an incomplete condition, when the want of proper conveniences, appliances and rollings-stock has been a serious cause of expense and difficulty.

“One very unfair comparison has frequently been made between Guaranteed and State Railways, which has led the Home Government to view State Railway management with unfavour-

able eyes. The East Indian Railway, which probably works under conditions more favourable to economy than any other railway in the world, has nearly always been taken as the standard for comparison with State Railways. The character of the traffic of the East Indian Railway is exceptionally favourable to full loads in both directions; its gradients are good; its fuel cheap; its gross earnings per mile of railway six times that of the average of State Railways; the comparison is therefore utterly untenable in every way; but if a comparison be made between the Madras Railway (Guaranteed) and the Rajputana Railway (State), the inferiority of the State Railway vanishes, and yet the conditions affecting the working are in these two railways, apparently not dissimilar. I subjoin a comparison which I made on a previous occasion :—

					(Comparison, 1878).	
					Madras	Rajputana
					(Guaranteed)	(State)
Gauge ...	...	...	...	...	5'-6"	Metre.
Mean age (years)	...	...	...	...	14 $\frac{1}{2}$	4
Length in miles	...	...	...	...	857	419
Gross earnings per mile per week	...	...	...	...	149	137
Gross earnings per train mile	...	...	...	...	3.08	2.99
Working expenses per train mile	...	...	...	...	2.34	1.85
Percentage of profit on capital	...	...	...	...	1.44	3.99

"It will be seen by this comparison that, although the Guaranteed Railway has the advantage in length and age, and although the gross receipts and the traffic carried by a train are practically equal in the two cases, yet the Rajputana Railway is infinitely superior as regards its working expenses and returns on the capital.

* * * *

"The assumption that has been made respecting the efficiency of the agency of Joint-Stock Companies, and the inefficiency of that of the State, entirely ignores the past history of railways in India, Lord Lawrence in his able Minute wrote as follows—January 9th 1869 :—

‘With reference to the Indian agency, both of engineers and other officers, it may quite safely be said that the Government under a reasonable system could, to say the least of it, secure as great ability with an equal outlay. I have not heard of any useful independent action taken in relation to Indian railways by the London Boards, which would be lost under a well-arranged system of Government. In no single respect can I see that less efficiency is likely to be secured under direct Government control than under joint-stock companies having their Boards in London.

‘My own very decided opinion on this point is that the direct agency of Government would certainly be more economical than that of Railway Companies, and that there would in almost every respect be advantage to the State financially, and therefore to the community of India at large, if the Government were to determine to carry out railway hereafter through its own engineers with money directly borrowed in the market for the purpose.’*

“One point for which probably no credit has been allowed to State management has pressed heavily on State Railways in the crude comparisons that have been instituted. Few can doubt the soundness of the views enunciated by Lord Lawrence in the following words:—

‘The experience in India in respect to the growth of capital is thus beginning to teach the same lesson that has been taught on a gigantic scale in England, viz., the urgent necessity for resisting the tendency to incur additional capital outlay without creating clear additional paying power in return; the enormous and ruinous extent to which the accounts of many of the English companies have become inflated has been for some time past the theme of public discussion.

‘I regard this danger with great concern, both in relation to the prospect of existing lines and our hopes for extending them.

* Pages 292-96 of the Asiatic Review for October 1916.

‘If the Government is to avoid it, some means must be found for putting an effectual stop to the insidious growth of the capital of old lines.’

“The principle thus ably enunciated, had been adopted by me for some years before my arrival in India, and when Director General of the Ceylon Railway I practically closed the capital account with the happiest results, as the railway has since paid more than 12 per cent. per annum on the capital expended.

“I strongly urged the adoption of the same principle on Indian State Railways, as far as practicable, and, in the infancy of State Railways, this line of action undoubtedly burdened heavily the revenue account, gave an appearance of excessive working expenses when compared with the Guaranteed Companies’ Railways on which this principle was not in force. But, although the principle was admitted in itself to be sound, it was, after some time, discontinued, on account of the hopelessness of having comparisons made except on the crude and ill-digested basis of bare results; and I was accused—and I must admit with some show of justice—of having ruined the State Railways in the eyes of the Home Government, by urging the adoption of this principle, however sound it might be intrinsically.

“It has lately been laid down, as a maxim for adoption that Government should, as a rule, divest itself of the task of working railways after they have once been constructed. Such a maxim violates every principle of political economy, and is opposed to the main grounds on which railway construction should be undertaken, *viz.* for the development of the country. Clearly the proper policy of the State is to develop the resources of the country by the lowest possible rates of carriage, and it might amply repay a Government in some instances to suffer some loss in railway working, provided that by the adoption of low rates the trade of a district could be stimulated. It is easy to conceive the case of a railway unsuccessful in a commercial point of view, and yet highly remunerative to the State.

* * * * *

"State agency has been tried and has not been found to be wanting. The assumption that the State Railway official has insufficient liberty of action is purely imaginary. The assumed superiority of management by Joint-Stock Companies is not grounded on any evidence. The mismanagement of the Ahmedabad Transfer Station under the officials of a company was so great that it became necessary to take that station out of their (Company's) hands and make it over to State Railway officials whose management of other Transfer stations was all that could be desired;* and in many cases when Guaranteed Companies have undertaken the erection of State Railway rolling stock, the cost has been very much in excess of that of similar work executed in the State Railway workshops. And the working of some of the State Railways contrasts very favourably with that of some of the Guaranteed Railways, though apparently under less favourable conditions for economy. * * * *

"The comparisons that have been instituted between Guaranteed and State Railway management have been untenable and misleading; but the Government has now, in the words of Lord Lawrence, to *'take up all the unprofitable lines for itself, and give all the profitable lines to private speculators, carefully guarding them, however, at the expense of the State against any possible loss'*".

After reciting his old Minute, Sir Guilford said—

"Past experience has shown that, notwithstanding every provision to the contrary, undertakings of this character, should they prove less remunerative than their projectors have anticipated, are almost invariably thrown back on the hands of the Government, which practically takes all the risk with little or no probability of profits. 'Private enterprise,' so-called, is, in India, no enterprise at all, but is simply a high-flown and seducing phrase, which will, I fear, prove to be an *ignus fatuus* to the Government of this country.

* See pages 196 *Supra*.

"The Accountant-General, in his Minute, characterized the despatch * of the Secretary of State as an attempt to make the most of a bad case, containing an amount of special pleading that might well take in anyone not well posted up in the history of Indian railways.

"He asked how it was possible that the substitution of private agency could compensate for the heavy fine the scheme would inflict on the revenues of India.

"He pointed out the folly of expecting better results from a Board in London than from that of one possessing such practical knowledge and experience as the Director-General of Railways.

"He stated that the control of railway companies gave more trouble to the State than the control of State Railways.

"He showed that the State had borne the burden of bringing the State Railways to their valuable and efficient condition, and that it was absurd to invite so-called 'private enterprise' to step in and share the profits, taking so much out of the pocket of the Indian ratepayer.

"He quoted Sir Henry Durand's Minute on Lord Lawrence's policy :—

'We have everything to gain by a positive, not a nominal, control; everything to lose by a feeble sham control.'

"He said that State Railways had been eminently successful and that State management was more economical than that of companies.

"He was convinced that the revenues of the State would have been largely enhanced, had the State constructed and worked the (old Guaranteed) railways at the outset.

"He estimated the annual loss owing to these lines not having been carried out by State Agency at £1,750,000, in addition to which the premium that would have to be paid for purchasing the Guaranteed Railways would be about £27,000,000†

* See pages 298-307 *Supra*.

† The premium actually amounted to £ 34,201,993 equal to Rs. 51,30,29,895.

"He urged that with these gigantic losses, practically all withdrawn from India, every endeavour should be made to stop further drain.

"It was reasonable to suppose that these strong protests, emanating from officers of such high position, might have been the subject of Select Committee to investigate the question; but when these Minutes were submitted to Lord Ripon, he noted upon them: 'This may be allowed to drop quietly.—Ripon.' India was sacrificed to political exigencies.

"Subsequently the Director-General of Railways† made an exhaustive analysis of Indian railways, showing strong evidence in favour of State management. He pointed out that comparisons were valueless, unless made at a similar period of their development; and, taking the eighth year after the opening for traffic, the percentage of working expenses to gross receipts for the whole of the State Railways, had been 57 per cent., as against 64 per cent. for the Guaranteed Railways."

Sir Guilford concluded the paper with the following weighty expressions:—

"I am of opinion that the reversal of Lord Lawrence's railway policy of State construction and management has been disadvantageous, and the continuance of such reversal is, 'in the interests of the people of India generally,' to be strongly deprecated !

"Every effort should, in my opinion, be made to bring about a better state of things and while increasing the revenue from railways, decrease the burden of direct taxation, and stimulate the construction of railways under direct State control and management throughout the country.

"If the policy which I adopted in Ceylon, of closing the capital account and paying off the debt from revenue by degrees, had been pursued, the State might now have been in the enjoyment of the net earnings of Indian railways."‡

† Major L. Conway-Gordon R. E.

‡ Pages 297-302 of the Asiatic Review for October 1916.

Had the Agency Companies not been employed in India, this principle might have been continued on the State Railways, but as the Companies are interested in charging as little of the railway revenue to the working expenses as possible (because it directly affects their share of the surplus profits), the Government have been allowing the cost of substantial improvements in the line, works, and rolling-stock to be added to the capital account, although the improvements may be carried out *at any time after the completion of the railway*. This may be according to the English practice, the evils of which were mentioned by Lord Lawrence and stand against the English people acquiring their railways from the Companies, but it is opposed to the modern practice in America, about which Mr. Neville Priestley writes—

“Expenditure is largely incurred on betterments of road, bridges, workshops, station machinery, rolling-stock, etc., to secure heavy loads. To charge it all to Capital would cripple the railway later on. A large, often a larger, portion of it therefore has been charged against Revenue, that is, operating expenses or profits. At first shareholders protested against this practice, but it is now generally accepted as wise.”*

In the discussion which took place after Sir G. L. Molesworth, K.C.I.E., read the foregoing paper at the Caxton Hall, Westminster, S.W., on 17th July 1917, Sir Bradford Leslie, late Agent of the E. I. Ry., said the duty obtained from a ton of coal on the State-worked lines was 2,670 ton-miles against 4,580 ton-miles realized by the Company-worked lines. Another item of expenditure, he added, was the maintenance of permanent way, in respect of which he found from the Administration Report that the representative State-worked lines carried 1,553 gross ton-miles per rupee of maintenance expenditure against 2,488 gross ton-miles per rupee carried by the Company-worked lines. These instances of the superior economy of Company working, he said, were confirmed

* Page 163 of Report on Organisation and working of Railways in America 1905.

by the ratio of total expenses to earnings averaging in the case of the representative State lines 55½ per cent, against 43½ per cent. in the case of the company lines. †

Sir Stephen Finney, C.I.E. was in the chair. He gave preference to ownership by Government and management by Companies but assigned no tangible reason in support of the latter. On the contrary he admitted the soundness of the arguments advanced by Sir Guilford Molesworth in favour of State ownership and management. † The arguments of Sir Bradford Leslie were misleading. It is surprising that a gentleman of his experience of railway working should have used such spurious arguments. Both the duty in gross ton-miles obtained from coal and the maintenance cost on gross ton-miles largely depends upon the quantity of traffic offering, besides the hauling power of engines and carrying capacity of vehicle stock. A line with a large traffic will necessarily show better averages on both these heads than a line with a lean traffic. The same is true of the percentage of total expenses to earnings. A line with large earnings will show a lower percentage of expenses than a line with smaller earnings. An argument of that nature cannot affect any one familiar with economics of Railway working. Sir Guilford has already mentioned (see pages 510-11) the favourable conditions obtaining on the E. I. Railway.

Colonel G. F. O. Boughey, R. E., who was for great many years connected with the Indian State Railways, and held the highest post, that of the Manager of more than one line, wrote to the London Times, in 1916, supporting the views of Sir Guilford Molesworth in favour of State management, especially on the ground that "while the Agent of a Company has mainly, if not solely, to look to the interest of his share-holders, the Agent of a State line may have other matters to consider in addition to the immediate prosperity of the line in his charge." The "other matters" included the reduction of rates desirable in cases of developing the country "without increasing, or perhaps while

† Pages 306 and 311 of the same Review.

even for a time decreasing the shareholders' profits." "The great interest of the State in the land, in the welfare of the millions who live on it and by it," wrote Colonel Boughey, "is one of the strongest arguments in favour of the contention that all the railways which carry much of the produce of the land for great distances, often a thousand miles or more, to the port for export to Europe, should be in the hands of the State."

SECTION.—4. Experience gained with Railway Companies in India.

The first railways started in India about the year 1849 were provided by what were known as Guaranteed Railway Companies.* The terms and conditions enforced by those companies were found to be so exacting and exorbitant and their working so unsatisfactory that the Government of Lord Lawrence about the year 1867 decided to have no more companies with Government guarantee in connection with the Indian railways. In a minute which the noble Viceroy left behind when he retired from India, he expressed his preference for the plan of State railways constructed by Government with borrowed money and worked direct by the State agency. His opinions have already been quoted at pages 222, 351-52, 369-70, 509, 512 *supra*.

In the evidence recorded before the Select Committee of 1884, we find most of the witnesses who knew Indian railways well, spoke very highly and favourably of State working.

In the preceding Section we have already given the opinions of Major L. Conway-Gordon, R.E. Let us now take first the evidence of General R. Strachey, R.E., C.S.I., F.R.S. :—

Q.—No. 105—"Then in point of fact you do not think railways can be worked more economically by companies than by the State?"

A.—"No, as a matter of economy I think our statistical returns give perfectly satisfactory results for State railways."

* Vide Chapter III *Supra*.

Q.—No. 109—“ You think the railways would be more likely to be of use to the public if in the hands of the Government than if in the hands of private companies ? ”

A.—“ I think the balance would be in that direction. ”

Q.—No. 112—“ You think that the public might obtain greater advantages from the Government than they would be able to do from the companies ? ”

A.—“ I am sure they would ”

Sir James Caird, K.C.B., was in favour of *all* the State railways being worked by the State. His opinions are contained in his answers to questions Nos. 393—95 and No. 492, which are quoted below :—

“ 393. Do you approve of the Indian Government guaranteeing those railways either in perpetuity, or for a limited period of time ?—My opinion is, that whilst the risk, if any, should be borne by those who are to benefit, that is the people of India, there are many collateral advantages in the Government of India *making the railways themselves, and retaining the entire control in their own hands.* They may at once proceed with the most advantageous lines. They have no interest to consider but that of India. It is in their power to secure the most competent railway talent for construction and administration and *that might be conducted by each province.* The Australian Government in order to protect themselves against jobbery and party influence, have done this and with success..... and I see no reason why India should not follow their example. They could adjust the question of rates, through and local, as they found most advantageous. By keeping the railways in their own hands there would be no adverse interests to contend with, no dual control, and the future profit from carefully selected lines could probably become a main and growing resource of public revenue.”

“ 394. Do I understand you to advocate that the Government of India should make the railways as well as have control over them ?—Yes. I believe that the Government of India could directly, by themselves, command the use of money on

more favourable terms than any company which is working under them. I believe that the Government of India under proper administration there, could lay out that money in the most favourable way; and inasmuch as they cannot get private capitalists to give money except upon such terms as practically would leave them in the position of indirectly or directly guaranteeing a certain return, I think, upon the whole, it would be better for the Government of India to undertake it for themselves."

"395. Do you mean the whole railway extension; all the new lines?—I think so, but it would be well that it should not be done by any single body in India. India is a vast country, and there are several provinces under different Governments, and with very able management in them. *I would sub-divide this great business through those provinces.*"

"492. Is it not the fact that owing to the East Indian Railway belonging to Government, they draw every particle of traffic that they can to that line, irrespective of the advantage to the other portions of India, and that that is the reason for refusing permission for making a line from Gwalior down to Bhopal, bringing the wheat from the N.W. Provinces to Bombay, and also is it not the fact that the Rajputana line being a narrow gauge line, thus preventing the wheat coming in that direction, the wheat, instead of being driven on to the west coast, is all driven to the east coast? I think if *the Government*, instead of having the command of only one line, *had the command of all the lines in India, their interest would be to make them all work to the greatest advantage.*"

The Italics are ours. We agree entirely with the answers of Sir James Caird.

With regard to the past experience of the employment of Companies on the Public Works of India, the discourse between Sir George Campbell and General Richard Strachey, R.E., C.S.I.,^{mat} F. R. S., before the Select Committee of 1884 is not ^{so} ^{of} ^{an} ⁱⁿ ^{ter} ^{est} ^{ing} ^{but} ^{an} ⁱⁿ ^{stru} ^{ctive} ^{read} ^{ing}. We refer to ^{que} ^{le} ^p ^{ais}

Nos. 233-265, some of which are reproduced below:—

“233. Then I come to another subject, that is, as regards the use of private enterprise in the shape of public companies, in constructing public works in India. You have had a very long experience in regard to public works in India, and I want to ask you, not taking the railways alone, but taking public works generally, whether (putting aside the regular guaranteed railway companies, and taking rather the companies which have undertaken the works more in the nature of private enterprise) your experience has been favourable to that private enterprise, and whether you have not generally found that companies that deal with works in India, having their head quarters in London, proceed upon the “heads, I win; tails, you lose” principle, that is to say, if they get a profitable thing, whether they do not hold on to it and try to make the very utmost of it without regard to the benefitting, or otherwise, of the people in India, and whether if they find that they are likely to make a loss, they do not throw it back upon the Government of India and insist (and successfully insist) upon being compensated and recompensed out of the finances of India?—That is perfectly true; I agree with every word of that, and that is one of my strong reasons for objecting to entangle ourselves any more in the way of guarantee. I do not care whether limited or unlimited. A limited guarantee is asked for now for ten years. If the Secretary of State gives a guarantee, what does he do by giving it? He testifies to his belief, more or less, that it is a sound concern. If it turns out to be unsatisfactory, the shareholders of the company will come down upon him, and say, “We have been misled; you misled us, and you must put us right somehow or other, either by extending the guarantee or giving us better terms or something by way of compensation.

234. As regards the few companies that have undertaken works without guarantee, in the nature of private enterprise, has not that been still more the case? Has it not been the case as regards the Orissa canal and several other undertakings?—The

Orissa canal, no doubt, was a very unfortunate business. The Madras Irrigation Company was guaranteed; the history of that is peculiar.

235. I merely ask, is it not the fact that the Orissa canal was undertaken as a private enterprise without guarantee?—It was.

236. And is it not the case that when it financially failed, the company came back upon the Government and insisted that the Government should reimburse them, and that the Government did reimburse them?—We were compelled to reimburse them.

237. And the Government not only reimbursed them the money outlay, but also gave them a large sum, which caused the secretary of that concern, who carried on the polemical correspondence with the Government, to go out of it with a very large sum in his pocket? They gave him something which was called compensation; he did not think it a very large sum.

238. Was it not something like £30,000?—There was a largish amount divided among the officers of the company.

239. And when the Madras Irrigation Company exhausted its guarantee, did not the same gentleman again turn up and get another compensation?—He was the Secretary of the Company; it was an unfortunate business.

240. Did not the same gentleman turn up in the Madras Irrigation Company? I dare say he shared in the compensation, but we never heard the secrets of the distribution of the compensation there.

241. Then I will allude to another company. Is it not the case that there is only one known deposit of coal in the Nerbudda Valley, that that deposit of coal was made over to a company under stringent conditions, under which they were bound, in consideration of getting that concession of the coal, to undertake large iron works, and to develop the iron resources of India, and also to make a railway in the coal works, and is it not the case that then the coal did pay, and it was thought that the iron-works must not, and that they insisted upon keeping the profits of

the concession, and abandoned the unprofitable part, and that as a matter of fact the iron engagement has been altogether abandoned. and that the Government have been forced to make the railway to the coal works, leaving the coal company to make a profit out of the coal if they can, the Government bearing the loss; and also failing to obtain that development of the iron which they had expected to obtain?—As far as my recollection of the terms of the Nerbudda Company's lease extends, they did not undertake any obligation to work the iron. Whatever lapse there may have been in that respect, was rather the lapse of the Government in not insisting upon their doing it; the agreement I think was merely that if they did not work the iron their concession would cease after a certain time, and so on; but in a general way I think your account of what happened there is a little highly coloured, though there is foundation of truth in it.

242. Is it not the case, as regards all the railways which have been undertaken by private companies, and that have failed to pay, the companies almost invariably have come back to the Government and obtained more favourable terms? Is it not the case that the Port Canning Railway being a total failure, Government was obliged to take it over; and is it not the case that even so lately as the concession to the Bengal and North Western Railway when it was found the shares did not go off, they came back again and secured more favourable terms from the Government?—As regards the Calcutta and South Eastern Line, as it is called, under the terms of the contract, the Secretary of State was bound to pay them back their capital, and he simply acted up to the terms of that agreement. After having paid them a great deal of money under the guarantee, I quite admit it was a most unsatisfactory arrangement. The Bengal and North Western Railway was a different thing. It is quite true that the promoters of that found that they had burnt their fingers. It did not go off on the market as well as had been proposed, and the Government was induced to agree to give up the share of profits in excess of six per cent which had been reserved under the original contract,

but it has produced absolutely no result; the shares of the Company are in precisely the same condition as they were.*

243. I do not ask particulars, I only ask this. Is it not the fact that after this railway had been taken up by a syndicate, finding they were likely to lose, they got more favourable terms from the Government?—That is perfectly true.

250. Are you aware that on the occasion of the Bengal famine of 1874, Lord Northbrook had occasion to express some dissatisfaction with reference to East Indian Railway?—Well, the East Indian Company made them pay, there is no doubt about that.

251. And very heavily?—And heavily; they were not very liberal, but they did the work very well.

254. Then I want to know what you gain by having the company; is not the company established merely upon "heads, I win; tails, you lose" principle?—In a certain sense, but exactly in the same way that your gardener is established upon that principle. You pay him his wages and he makes a profit out of his employment, because it is more convenient for you to get somebody else to dig your garden, or water your flowers than to do it yourself."

General Richard Strachey held high offices under the Government of India from the year 1858. In 1884 he was a member of the India Council in London and finally he was the Chairman of the E. I. Ry. company. He was the joint-author of the well-known book "Public Works and Finances of India." His opinions carried great weight. We have already quoted his opinions in Section 2 of Chapter VI, where he expressed himself highly in favour of State management, still he recommended the employment of the Companies as a matter of convenience. Considering the great advantages from Government working of railways which are generally accepted, the question of convenience does not arise now that we have reformed Councils.

The Secretary of State has been continuously dealing with the British Companies generously at the expense of India, because

*The line has been earning over 6 per cent. since 1903 and the Government would have received a share of the profits but for the change in the contract.

the Indian people have had no control over his autocratic powers. The cases of the older Companies were fully exposed before the Select Committee of 1884, and it was expected that there would be no more repetitions of that character but the cases of the new companies formed since 1879 furnish further examples of the same generosity at the expense of India, see pages 334-60 and 465-68 *Supra*. The cases of the Agency Companies, of the B. and N. W., the D. U. K., the Kalka-Simla, the Bengal Central Ry. Companies may be mentioned here specially.

The development of railway traffic in India has been generally natural in the ordinary course of circumstances, hardly have any efforts or skill been employed by the railway authorities to create new traffic, as is done in European countries by means of conveniences, facilities, comforts, advertisements, etc. to attract additional traffic. Here in India traffic generally comes to the railways in the ordinary course, sometimes in such quantities and numbers that the railways fail even to provide the requisite rolling-stock. Indian passengers are naturally drawn by their religious beliefs to the numerous places of pilgrimage.

In this connection we would draw attention to the memorandum on the loss or gain resulting to the State from the lease of the R. M. State Railway to the B. B. and C. I. Ry. Company, by Mr. Frank Morrison, Examiner of guaranteed railway accounts, dated 28th July 1886, which is printed as appendix F, pages clx to clxix of the Director-General of Railways' Administration Report, part II for the year 1885-86. We quote below the concluding para of that memo:—

“It may be noticed that it is very probable that the modification in the R. M. Ry. rates and fares, and particularly the division with the B. B. and C. I. Ry. Company, of the through traffic receipts upon a mileage basis, has on the whole proved detrimental to the interests of the State railway, and that, had the financial result of these changes been approximately ascertainable, it would have considerably augmented the loss exhibited in this memo. But apart altogether from this, the actual loss of income (in the

first year of the lease) as set forth in the attached statements, represented by Rs. 6,51,844 as regards the State railway, and by Rs. 3,58,668 in respect of Imperial revenues, is *virtually a handsome bonus to the railway Company unattended by any appreciable advantage*. The changes in the supervising staff have not resulted in any practical economy but have rather enhanced the cost of working, nor can it be said that any direct benefit has yet accrued to the State railway from the unity of management, for, with the single exception of the office of the Agent (or manager), the management of the two lines is virtually as distinct as ever, no fusion of the various offices and subordinate establishments having yet been attempted. Any additional traffic attracted to the State railway under these circumstances can hardly be the result of the amalgamation, but must be regarded as a normal expansion of business independent of the lease of the State line to the B. B. and C. I. Ry. Company."

SECTION 5.—Experience of other Countries.

In his "Historical Sketch of State Railway Ownership" 1920, Sir W. M. Acworth shows that in democratic States political influences have always interfered with business management, that Parliamentary interference has meant running the railways, not for the benefit of the people at large, but to satisfy local and sectional or even personal interests; and expresses the hope that "some day perhaps, having learned wisdom by experience, a Parliament and a people may recognize that management for the people is not necessarily management by the people; that there are other branches of government, besides the judicial branch, unsuited for popular interference; and may establish a permanent State railway organization, with its own board of management, with its own separate budget, and entirely independent of Parliamentary control, but controlled, where necessary, like any private company, by a judicially-minded Railway Commission, required also like a private company to earn a dividend for its stockholders, the people."

It is very questionable whether the governing body of a railway should be independent of the Government as the judges of a High Court. Five of the seven Australasian States have, however, already tried such non-political Commissions from 1884, but the results have not been altogether satisfactory, and the State of Victoria, where the Commission was started first, has ultimately abolished it altogether, reverting to the appointment of a General Manager under the Ministry, vide pages 89-93 of that sketch.

The Railway Board in India is an autocratic body, very similar to the Commissions of Australasia. Likewise the Railway Board has failed to give satisfaction to Indian people. In many cases it has taken sides with the companies, sacrificing the interests of the public. If Sir William Acworth's opinion is based upon "Stubborn" facts from European Railways, we have a *contrary* opinion based upon *similar facts* from the history of the Indian Railways. To put the Railways on a satisfactory basis, we must bring them under the control of the Indian people. India cannot afford any longer to leave the direction of its Railways in the hands of experts who do not know the country nor understand the requirements of the people, or who will not listen to the people.

If Sir William Acworth's object was to establish the need for a judicially-minded Railway Commission, he might have dwelt at some greater length over that subject; but his whole sketch is directed mainly against State ownership and operation with appreciations in favour of company working.

He shows that the best among the State-managed lines of the world—the Prussian Railways—were only second to the Company-managed lines of America or France, comparing their results as under:—

	Prussia	America	France
Freight per ton-mile for goods in bulk for long distances ...	0.16d	0.15d	...
Reduction in freights made between 1880 and 1909 ...	15%	40%	...
Ditto between 1905 & 1911 ...	1.15%	...	11%

Average rate for coal per ton-mile						
in 1905	...	...	...	0.49d	...	0.49d
Ditto. for other freight	...	...	...	0.785d	...	0.775d
Average rate for whole freight per						
ton-mile in 1905	...	...	...	0.67d	...	0.70d
Percentage of working expenses on						
gross receipts	...	...	...	62 to 67	...	54 to 63

Any comparison of railway rates between different countries must necessarily be more or less unscientific, owing to the varying conditions under which their lines are worked. Among these conditions we take age of Railway, gradients in line, cost of wages and fuel, length of haul, nature and quantities of traffic carried, buying power of money, etc. A comparison to be of value, must be made under like conditions. The only comparison that can give any clear idea of the results obtained will be a comparison of Prussian rates under State ownership with Prussian rates under company ownership. Sir W. M. Acworth has not made such a comparison. Moreover he has shown nothing against the financial results of the Prussian State Railways which have been running a golden stream of profits into the State treasuries.*

He is not satisfied with the Belgian or Swiss State Railways, because they do not make surplus profits, over and above the interest on capital, though they render a highly satisfactory service to the public at reasonable rates and fares, and give just treatment to staff.

He shows that the financial condition of the Italian State Railways was at a collapsing point in 1913, which he thinks would not have come if the railways had been kept in the hands of companies. He does not give due weight to the fact that it was the company management of the Italian railways, which kept "the road-beds, rolling-stock, stations, and everything else connected

* Page 160 of "American Railway Problems by Carl Vrooman 1910, and page 78 of the "Historical Sketch of State Railway Ownership" by W. M. Acworth.

with the roads" in a "worn-out or out grown" condition when the State took over the lines in 1905; at the same time the companies' employees were in a constant state of friction bordering on a state of industrial war. All these have been suitably remedied by the State and the financial results of the first two years 1905-06 and 1906-07 were far better than those for 1903 and 1904 under the companies. *

The worst example of State-management narrated by Sir William Acworth is that of the French railways, which were taken over by the State in 1878 and 1909 from bankrupt or unprofitable companies that were working the lines already at losses under State guarantees. According to Sir William himself the district "was purely agricultural and its traffic scant," and although the financial results were very unsatisfactory (the operating ratio over a series of years ranging between 72 and 82 per cent.); still in some respects, as, for instance, admitting third class passengers on all express trains, "the State gave to the public advantages which the private companies did not give."

These are apparently unprofitable lines like the strategic railways of India. If so, we should not cite them as an example of bad management.†

Sir William Acworth writes, "that, while the American Companies have boldly revolutionized their machinery and methods of carriage, the Prussian State has clung to old machinery and old methods." "In all the history of railway development," he adds, "it has been the private companies that have led the way. It would be difficult to point to a single important invention or improvement the introduction of which the world owes to a State railway." (pages 60-61).

In answer to this we may mention the Screw Coupling and Flexible Buffer invented in the eighties of the last century by

* See pages 125, 131, 171 of "American Railway Problems."

† Page 176 of "American Railway Problems" and pages 29-39 of historical sketch of State Railway ownership."

the late Mr. W. R. S. Jones, then Carriage and Wagon Superintendent of the Rajputana State Railway, which is largely used all over India and probably in other countries. We are not aware of any similar invention by the Companies employed in India. And finally he urges the claim of a distinguished English authority, Sir George Gibb, that "private enterprise is bolder, companies are more flexible, more ready to take risks and to try experiments in new methods, than any State organization could be," that "if a company improvidently or unwisely invests its capital in a non-paying proposition, while private individuals lose their money, the public is uninjured." The whole history of the Indian railways refutes such a claim. We have not seen any private enterprise among the British capitalists who have invested their money in Indian railways, they have taken no risk whatever but have thrown all burdens on the State, the people of India.

Sir William, however, admits the following:—

(1) "If the nations of the world were polled great and small, and assigning to each nation one vote, as at the Hague Convention, a considerable majority would be found to have decided in favour of entire or partial State ownership (page 4 of his Sketch).

(2) That in the seven States of Australasia, "the State railways have been jealous of interference by private companies."

"No proposal to divest the States of their ownership would be listened to for a moment" (page 23).

(3) That "in various countries where the system of private ownership prevails," "the public are more and more coming to the conclusion that railway business is not a fit subject for competition, that railways ought to be a monopoly, either owned or closely regulated by the State" (page 28.)

(4) That in Belgium a recent "proposal (of the Government) to lease the (State) railways to a private company" has been almost unanimously rejected by public opinion (pages 101-02).

(5) That "it is commonly claimed, as one of the advantages on the side of the State, that it can raise capital more cheaply than any private company. And the claim is not without substance." (page 44).

We have read Sir William Acworth's sketch with much benefit to ourselves, but we would strongly advise the readers to peruse also the book of Carl Vrooman on "American Railway Problems," where the question of State ownership and operation has been discussed at a much greater-length and in fuller details relating to American and European railways. We are inclined to accept the latter author's conclusions:—

"By the foregoing studies (in that book) in comparative efficiency and all round satisfactoriness, it has been clearly demonstrated that in *continental Europe*, State Railways, as a rule, furnish better transportation facilities and charge lower rates than do private companies; that in connection with the State Railway managements examined, there exists practically nothing in the nature of a 'spoils system' to prevent them from securing efficient officials and employees; that graft and corruption are much *less* frequent in connection with State railways than with private ones, that travel is much safer on Government roads than on Private lines, and lastly, that State Railways, instead of being troubled with deficits which have to be made up from the hard earned shekels of the taxpayer, in a large majority of cases have made an entirely satisfactory financial showing, and in some cases, notably that of Prussia, have lightened the burden of the tax-payer enormously. If there exists any inherent advantage therefore in the one system or the other, such advantage assuredly is to be found in the system of public ownership and operation" (pages 293-94).

"One very frequently hears urged as an objection to Government ownership of railways, the fact that the percentage of rail-
 found—ings which is absorbed in working expenses is bound
 market to be under Government than under private management.
 induced to be not only undeniable but self-evident.
 per cent. which not raise wages, shorten hours of labour, improve

the service it renders, and decrease the remuneration it demands for that service, without noticeably increasing the percentage of its earnings which must go for working expenses. This objection to Government roads is only another way of stating the most important argument which can be mentioned in their favour, *i.e.* that the aim of State roads is essentially different from that of private ones. Private roads have a supreme object in view—profits—though their managers recognize that in order to gain these profits they must furnish the public with a service that is not too unsatisfactory. Government roads likewise have a supreme object in view—the public service—though their managers recognize that in order to make that service permanently satisfactory and increasingly efficient they must assure themselves a reasonable remuneration. In a word, the corporations ‘charge all that the traffic will bear,’ whereas the Government gives all that the rates demanded can be made to pay for” (page 295).

“Thus after a careful survey of the results of Government ownership of Railways in the leading countries of continental Europe” states Mr. Vrooman “we are forced irresistibly to the conclusion that these Government roads can boast of having given better service and lower rates to the travelling and shipping public and better pay and better conditions of labour to their employees than have the corporation Railways of the same countries. In addition to all this, the financial results of these roads have been entirely creditable. In the long run no deficits have been created by any of the Government railway systems under consideration and profits have been gained sufficient for all the requirements of the service including the payment of interest on their bonded indebtedness as well as certain amort^{ve} each year towards the liquidation of that debt. These ^{is} this ^{are} these are not matters of opinion. They are facts w^h commit-statistical data just examined in considerable detail d^e expenses in to be true beyond all peradventure of a doubt” (pages ^{alone a real}).

In the face of such overwhelming evidence it is necessary for the Government of India to go

of working of Indian Railway Companies, especially as the experience gained in India itself between the years 1850 and 1867 is quite sufficient to decide against the employment of private Companies for the working of the Indian State Railways, but neither the Secretary of State, nor the government of India could afford to decide against the influential British Companies.

Sir William did not mention the Japanese State Railways at all in his Sketch. At pages 134, 151 and 429-31 herein, we have referred to some aspects of those railways. To our mind they are very satisfactory. India has thus far followed the English system, with the analytical system of America. It should take some lessons from the land of the Rising Sun also, and abandon the company-system at least for the national railways.

The railways in the past have been worked in an unsatisfactory manner, ignoring generally the requirements of the people of India and to the detriment of Indian Industries, trade and commerce and injustice to the children of the soil. Money has been lavishly spent both on construction and working of the railways. Although the people of India have been made to bear all the financial burdens involved by the railways, they have been systematically kept out of their share in the administration and have been kept ignorant of the uses and working skill of the lines.

We are not quite satisfied even with the State-management as it is carried on at present, still we hold that that management is superior to the Company-management, as it is capable of being remodelled into a satisfactory system under the influence of the Government of India. The Agency companies, cannot be expected to take that interest which the owners themselves of the company would, and consequently we find the companies lavishly spending money for the benefit of non-Indians, as the money does not go into the pockets of the companies' pockets.

Where there are competitive railways, private companies may be induced to render better service with a minimum of cost; but where there are hardly any competitive lines. Care has been

taken not to build such lines. Those places in India where competitive routes have, however, naturally cropped up, the competing administrations have agreed among themselves not to compete, but to divide traffic between themselves, and the block-rates are a result of such agreements. Thus the people cannot have the benefit of competition either, which is generally claimed as an advantage from private service. There is, on the other hand, an overflowing flow of traffic in India both in goods and passengers, for which the railways do not even find accommodation, so that there is no idea of competition at all between the railways at present. As a matter of fact there has never been competition between the railways for passenger traffic in India, and that is the main reason why accommodation for Indian passengers has not been improved or made tolerably comfortable.

If there were independent private enterprise, we would support it to a limited extent, but the companies managing the vast and most vital property of the State, almost independent of any control by the State, practically form an irresponsible body since they bear no risk whatever. By their constitution they cannot and do not take that interest which is claimed for private enterprise.

There is no effective control to keep down their expenditure; their agents and higher officials are satisfied with their princely emoluments and unrestricted powers. They keep down their Indian subordinates and deprive them of their just dues. Whenever the subordinates ask for relief, the officials bring forward the plea of economy and growing rise in the working expenses, which neither the Boards of Directors, nor the Agent, in India ever raise, when raising the high emoluments and perquisites of the higher officials or in keeping up the lavish expenditure to this for the benefit of the privileged classes.

The railway companies have a large influence on the independent commitment of expenses in both in India and England, and that is the main reason. Then alone a real Government have not taken the necessary steps. to have taken on the existing evidence and

proving excellence of the State-management. The companies themselves find that they cannot, any longer in the face of the public opinion in India, carry on the administration from beyond the seas, and it has been suggested that their head-quarters be moved to India. This will not remedy the evils we complain of. We need nothing short of entire management by the State and management under the direction of the reformed councils. To make the constitutional reforms a success, the management of the railways should be brought under the new Councils, and the companies eliminated as early as their contracts admit.

SECTION 6.—Conclusion.

As a result of the discussions held in the Legislative Council of India and the agitation carried on in the Indian press for the last ten years or more, the Secretary of State has appointed a Committee to enquire into the working and administration of the Indian Railways, so as to adopt for the future either the system of State management or that of Company management for railways owned by the State, and the Report of the Committee is eagerly awaited.

The case for State management was fully made out during the discussions which took place in the Viceregal Council in the years 1910 to 1918. From the Indian point of view there was no need to appoint the present Committee. The decision of the matter should rest with the Indian Legislature. The action of the Secretary of State in appointing the Committee interferes with the legitimate business of the Indian Legislature. removed to assist the Committee, the statements forming appendices to this volume, were presented to the Committee on the 12th of November 1921. They were accepted by the President, but later they were returned from London, with a statement that they would not be printed for record in the Committee. The autocracy of the Government of India is so complete, that no sign of such a change is visible.

in the autocracy of the railway administrations. When the reforms suggested in this volume are carried out and enforced, then Sir William Vincent may make that claim. So long as the Indian railways are worked under the present system, autocracy will continue in its worst forms. Indian railwaymen are daily witnesses of this autocracy; Indian passengers and Indian traders are daily victims of it. Indian industries cannot be improved, mechanical engineering is practically closed to Indians, public money is wasted like water. Economic life of the people is stunted. Prices have gone up beyond the means of the people, it has become hard for the poor people to live. Such stress was never felt in the living memory in India. It did not exist in the pre-rail days even during the British Raj, and no body can deny that these conditions have come in the permanent form we find them, through the connection of India with Europe, established by the railways. The remedies suggested herein will materially mitigate the stress.

Since these lines were penned, we have read with satisfaction, the speech of His Excellency Lord Reading, at the Chelmsford Club at Simla, on the 31st May 1921 laying down the following three propositions:—

(1) The fundamental principle of British rule in India that "there can be no trace, and must be no trace, of racial inequality;

(2) That there cannot be and must never be humiliat^{on} under the British rule of any Indian, because he is an Indi^{etails}.

(3) That the British people in India and those ^{ails,} we in England, must realize that they have much ^{sation.} We disperse, many understandings to banish from am^{ature} to this that, in truth, the essence, to His Excellency's ^{pendent} commitment between the British and Indians is that ^{ails} of expenses in convince the latter by their actions wh^{Then} alone a real thoughts and intentions that they honest^{nces.} what they have said with regard to Indi^{nces.}

For our own part we assure P

of India will reciprocate to the full extent of their power; India wants justice and if that is sincerely done, she will heartily rejoice. But will the Britishers in India respond to Lord Reading's just appeal?

"A Just Rule" was first promised in the Charter Act when all distinctions of race, it was declared, would be obliterated. A Just Rule was next proclaimed by Queen Victoria in 1858, when our contentment, prosperity and peace were declared to be the Sovereign's source of strength and satisfaction. The same was reaffirmed in the Royal Proclamations in 1877, 1903 and 1911. The abolition of the racial discriminations was promised again in the Report of the Royal Commission on Public Services in 1916 and in the Montagu-Chelmsford Scheme of 1918, but the discriminations are still continued both in practice and in theory as shown in Sections 6, 7 and 9 of Chapter II herein.

The reform of the railway administration in India will have a very healthy effect on the economic and general life of the people. The railway administration vitally affects the general administration of the country. The railway reform therefore means the reform of the general machinery of Government. As dyarchy is being talked of for introduction into the Government of India, the Railways should be one of the first subjects to be transferred to Ministers. We place the railways in the forefront in the economic reforms to be carried out in India, see pages 35 *Supra*.

The principal reforms suggested in this volume may for the Government convenience, be put together as follows:—

1. Provincialization of the railways and reform of the Railway Wages 112-16.

2. They for management gradually for all State Railways.—
3. Part of the 3rd VIII.

4. Princes for the organisation of their
5. Pages 293-95.

6. the system of working and establish-
7. Colleges to secure a maximum of

efficiency with minimum of labour and cost, pages 186-95.

5. Government control over Rates and fares, pages 327 and 465-69.

6. Assimilation of the Indian Railways Act with the English Railway Acts, pages 464-75.

7. Appointment of a Permanent Railway Commission, pages 475 and 490.

8. Check on capital outlay, pages 48, 393-94.

9. Inclusion of Establishment Rolls and Working Estimates in the annual Budget Estimates, page 398.

10. Creation of a Reserve Fund and application of Sections 132 and 145 of the Indian Companies Act to railway accounts, page 45.

11. Reduction of salaries of higher officials, pages 150-54.

12. Inspection and passing of railway stores purchased from contractors by a committee instead of by individual officials, page 48.

13. Raising of railway loans in India, pages 380-83.

14. Liquidation of Railway debt, pages 304, 323.

15. Increase in the number of daily passenger trains run on the railways to avoid overcrowding, page 72.

16. Improvements to be made in 3rd class carriages, page 75.

17. Introduction of intermediate class on such lines as might not provide it, page 78.

18. Provision of Hindu and Moslem Refreshment⁺ arranged on page 83.

19. Economic use of wagon-stock and curtailment⁺ use details, we outlay thereon, page 391.

20. General reduction of passenger fares. Legislature to this

21. Simplification of Goods Tariff and⁺ independent commit-
page 450-57.

22. Revision of through-rates ar⁺ ways. Then alone a real
pages 454-55.

23. Proposal for the wind⁺
Railway, pages 275-77.

24. Increase of interest for Branch Railway Companies from 5 to 8 per cent. per annum, pages 380-83.

25. Private enterprise for further extension of Railways, page 390.

26. Improvement of agriculture and expansion of manufacturing industries, page 59.

27. Utilization of railway workshops for practical training in combination with Technical and Industrial Schools and Institutes. This is especially necessary for improvement and expansion of manufacturing industries in India. Even agriculture will not pay, without the application of scientific methods, and the people cannot adopt them unless and until they acquire some mechanical knowledge to handle and locally repair modern machines. Independent Technical Institutes will cost large sums of money, while the railway Workshops already possess the requisite machinery and equipment for mechanical training, which has been provided on a large scale at the cost of the State, see pages 144 and 175.

28. Recruitment of officials for the State railways and application of the rules anent thereto to State railways worked by the Agency-Companies, pages 136-49.

29. Larger employment of Indians in the higher posts of the superior as well as subordinate grades, pages 154-68.

30. Removal of racial discriminations and inequalities among the railway staff and in the treatment of the public, pages 197.

in the Organisation of Labour, pages 198-200.

35. Suppression of the autocratic powers of officials over the staff, page 162.

Government of total salaries and wages in the annual Budget, numerical strength of railway servants of the State, pages 134.

Flexibility for management of Railway Companies, and foundation of the Indian Railway Conference. There are conditions of the Indian Railway Conference. Table of Rates and Fares in the per cent. are here, the page 423.

SECTION 7.—Recommendations of the Railway Committee 1920-1921.

Since the foregoing conclusion was printed off, a summary of the recommendations of the Railway Committee has appeared in the newspapers. We hasten to embody the same for our readers, with brief comments of our own.

The Committee show that the existing Indian Railway system is entirely inadequate to meet the needs of the country, and that there is urgent need of drastic measures of reform and reconstruction. They consider that the defects are due primarily to the failure of Government to provide adequate funds for capital works and renewals, and are the inevitable results of paralyzing a system which has not been developed to meet the requirements of great commercial enterprise. Stress is laid on the point that railway investment is directly profitable and also indirectly through benefit to the country.

We are glad the committee have found an urgent need of drastic measures of reform in the Railway Administration, but we do not think that inadequate supply of funds is primarily responsible for the defects.

The defects of the railway administration are of old standing and are due to the wrong policy followed by the bureaucrats.

The failures in the supply of funds for railways, or railroads, only during the war periods in 1878-79 and after occurred on other times the railways had ample funds according to the details resources of the country. Between 1884 and those details, we were overflooded with funds and the construction was pushed on with undue haste, opening the Legislature to this sufficient works and stock. These are the independent commitments for funds required for the deficiencies of expenses in at pages 45-46, the difficulties are railways. Then alone a real the railway administrations, to make way finances. the construction of rolling-stock

to set aside, out of the net receipts before declaration of surplus profits, funds for the arrears of repair and renewal work which they were unable to carry out for non-receipt of material from England owing to the war.

The country does not need so much an extension of the railway (see pages 390-94) as it does the proper administration of the existing lines. The Committee appear to ignore the financial resources of the country. We maintain that railways in India have been constructed with undue haste, beyond the means of the country and that the people of India have not been trained, as they ought to have been, to be able to obtain the benefits of the facilities opened by the railways. At pages 50-63 of this volume we have referred to the economic effects that have been produced by the introduction of the railroad in India.

The Committee are perfectly right that the subordinate position of the railway administration is not in accord with its financial (and we should add economic, industrial and general) importance.

They state that the Member of Council for Commerce, with his present multifarious duties, cannot adequately attend to railways, with the result that the Railway Board is in the position of a step-child. It is overloaded with routine, trammelled by unnecessary restrictions and does not exercise powers in matters of policy. As at present organised, it cannot possess the necessary local knowledge and does not enjoy public confidence. The supervision inspection is never done. A greater provision of traffic is especially needed. Accounts and Government in need of radical reform; railway relations with unsatisfactory and greater control of Rates and

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inspections by Members of the Board.
Railway Board itself is responsible.
control over the working of the

Railways, the Board confined itself to a policy of non-interference with the autocratic actions of the local authorities, ignoring the serious inconveniences from which the public have been suffering.

The Committee recommend an addition to the Governor-General's Council of a Member for Communications responsible for Railways, Ports, Inland Navigation and Road Transport, and Post and Telegraphs. He must be an experienced administrator but not necessarily a mechanical expert. This is a step in the right direction and we fully approve of it. We trust an Indian will be appointed to take this portfolio.

The Railway Board is to be replaced by a Railway Commission.—

- (a) With a technical railwayman as Chief Commissioner responsible under the Member of the Council, for arriving at decisions on technical questions and advising the Member on matters of railway policy, and having the status of a Secretary to Government.
- (b) He would be assisted by four Commissioners—
 - (i) One Financial Commissioner as second in command at head-quarters and in charge of Finance, Statistics, Secretariat, and Establishment; and
 - (ii) Three Railway Commissioners in charge respectively of Western, Eastern, and Southern territorial divisions. The Divisional Commissioners are to be normally engaged at head-quarters but they may devote a substantial portion of their time to occasional visits to their Divisions.
 - (iii) The technical staff at head-quarters is to be strengthened especially on the traffic side, those details, we estimate, comprise of six Directors in recommendation. We recommend to the Legislature to this end, accounts, civil engineering, and traffic operating, traffic independent committee on inland navigation and roads, and details of expenses in

The Railway Commission will always. Then alone a real secretariat, enlarged and staffed to manage railway finances. approve of its proposed cons-

- (iii) That the charges made to the public for the conveyance of passengers, goods, etc. are reasonable to cover the costs of working including interest, etc. under clause (ii) above.
- (iv) That the liquidation of the Railway debt as contemplated by the Government of India in 1883, is gradually carried out. See pages 304 and 323.

This would be a very liberal arrangement. The tax-payer is entitled to a substantial return on the large contributions he has made in the past to railway expenditure as shown in Appendix No. 8. The objections to a separate railway budget recorded at page 21 of the Report of the Mackay Committee, need not block this arrangement.

The Railway Budget should give full details for each Railway as in the Establishment Rolls and Working Estimates, prepared by each Railway for its own use, so that the members of the Legislative Assembly may be able to criticize the details, see page 398.

The reconstituted Railway Department is to be relieved from control by the India Office and Government of India, except on large questions of finance and general policy. It should delegate increased powers of day-to-day management to the Railway administrations, but on the other hand should be given greater powers in matters such as initiation and enforcement of reform right and some control over the appointment of principal officers of railways.

We note with satisfaction the recommendation of the Committee for relief of the reconstituted Railway Department incurred on the control hitherto exercised by the India Office, into the details of those details, we control in the past has very largely favoured the recommendation. We Companies, at times against the consideration of the Legislature to this Government of India.

We do not, however, approve of that independent committee which refers to the control by the railways of expenses incurred on the railways. Then alone a real This control must be more rigidly exercised in the railway finances. the past. The complaints of the railways the efficiency of the railways

The Railway Commission should certainly have full powers to initiate and enforce reforms and remove the racial discriminations now in vogue on the Railways.

To give the Indian public a voice in the railway management, the Committee recommend the establishment, as soon as possible, of one Central and a number of Local Advisory Councils; the former under the Chairmanship of the Member of Communications, to consist of not more than 25 members—

3 or 4 representing departments of Government concerned:

8 or 9 to be nominated by trade and Industrial Associations :

14 or 12 to represent agricultural interests and the travelling public to be nominated by the Provincial Legislative Councils.

The Local Advisory Councils to be about half the size of the Central, and similar in constitution, meeting either at the headquarters of each railway with the Agent as Chairman; or at each important railway centre, the Agents of all railways concerned being members and one of them the Chairman.

on the 17th. We should give this recommendation a trial. Instead of
transferring Councils, we should prefer proper Councils whose
in the 17th should be binding upon the Railway Administrations.
su. 35 The Committee have not accepted our proposals for the
removal of the Railways, we would accept the Committee's
Governor-General as an experimental measure. The Committee
rejected the recommendation according to the practice of
the railways, but India is a very large country
the railways each Province of India should
country. The whole of India is too big
proposed Railway Commission.

and the establishment of a Rates
Committee as Chairman, and one Rail-

way and one Commercial Member, with jurisdiction over all questions of reasonableness of rates and facilities; the Tribunal to investigate the conditions attached to Owners' and Railway Risk Notes, and frame a standard form; in certain circumstances an appeal to lie against the decision of the Rates Tribunal to the Governor General in Council. The Committee have noted that the provision in the Railways Act for Commissions is unsuitable. The Rates Tribunal should, in our opinion, also have the power to adjudicate the reasonableness of Passenger fares as in America, and the extended powers given to the Companies in Rates and Fares since 1900 (vide pages 467-68) should be withdrawn.

It is a pity the Committee have not expressed their opinion on the simplification of Goods Tariff. On this the recommendations (see pages 455-57) of the late Government Director, Sir Juland Danvers, and Mr. Thomas Robertson should hold good. Unless the Tariffs are simplified and uniform scales of Rates adopted as in Japan, we are afraid the number of claims will not be reduced. We shall be glad to see a procedure laid down by the Railway Commission that will expedite the settlement of claims.

A close watch by the Inspectors of Traffic to be attached ^{separated} fares of Railway Commission and the association of the public railway Advisory Councils will, it is hoped, stamp out the serious spread abuses connected with the allocation of wagons not the right which, the Committee observe, have grown up in the railways, bribery and organised blackmail. The discussion incurred on Legislative Assembly on the 20th September to go into the details Venkatapathi Raju's resolution on ^{we} into those details, we Departments showed the intense feeling recommendation. We subject. Mr. Bryant was especially ⁱⁿ Legislature to this need for the enquiry into the Railways independent committee Government Member for Commerce ^{to the details} of expenses in Railways and asked the Assembly Railways. Then alone a real amendment in view of the Railways finances.

*As stated below the Committee

of the Railway expenditure. Special enquiry into this expenditure is necessary in reference to the demand of the Railways for substantial increases in Rates and Fares.

The conveniences of the lower class passengers may be reduced by loan of Carriage stock from one railway to another in times of occasional fairs or large gatherings, but the daily overcrowding of passenger trains is due to the old policy of running insufficient number of trains. That policy should be changed and the Railway Administrations directed to run more passenger trains in their daily services.

Without an appreciable increase in the number of daily passenger trains, the extended employment of Passenger Superintendents will not stop the overcrowding of trains.

The Committee consider a general and substantial increase in Rates and Fares overdue and recommend such an increase, the present sur-tax on railway traffic which is bad in principle, being withdrawn.

The grounds upon which this recommendation has been made are not given in the summary. Very probably the sur-tax has led the Committee to think that the traffic can bear substantial increase. The sur-tax is responsible to some extent for the recent rise in the cost of living, about which serious discontent is prevalent among the masses. We are decidedly against any large increase in the ordinary goods rates; the special rates for export and import goods, which are low, should certainly be raised.

With the statistics we have quoted in this volume, especially those at pages 425-30, we strongly hold that a substantial reduction, *not increase*, in the Passenger fares is desirable both in the interests of the Railways and the general public.

The railways are already making large profits from passengers. For instance, the statistics for the E. I. Railway showed the following percentages of profit on the costs of working during the two half-years of 1919-20:—

	In 1st-half year.	In 2nd-half year.
1st class ...	70 per cent.	78 per cent.
2nd class ...	77 "	84 "
Inter. class ...	87 "	96 "
3rd class ...	421 "	379 "

Notwithstanding these profits, the E. I. Railway has notified the following enhanced fares from 1st October 1921:—

	For first 300 miles. Pies per mile.	For additional distances. Pies per mile..
1st class ...	24	18
2nd class	12	9
Inter class mail trains ...	6	4½
" Ordinary ...	4½	4½
3rd class mail trains ...	4	3½
" Ordinary ...	3	3

Compare these with the fares on the Japanese State Railways given at page 430. In the Council of State a statement was made on 6th September 1921, on behalf of the Government, that the fares were proposed to be enhanced because the working expenses for 1920-21 had gone up by 81 per cent as compared with those in 1915-16. This does not prove that the fares of 1921 were unremunerative. We maintain that the railway expenses are capable of large reduction.

The enhancement of Rates and Fares is not the right course to follow. To improve the finances of the railways, large reductions should be made in the expenditure incurred on the Railways. The Committee had no time to go into the details of Railway expenditure. If they had gone into those details, we feel sure they would have made a different recommendation. We particularly draw the attention of the Indian Legislature to this matter.¹ The Assembly should appoint an independent committee to make a searching enquiry into the details of expenses in all Departments of the principal Railways. Then alone a real improvement will be made in Railway finances.

The Committee consider greater facilities are necessary for training Indians for the superior posts. But when are these facilities to be allowed or provided? The recommendations of the Public Services Commission, and those of the Indian Industrial Commission for such training are lying probably in the pigeon-holes of the Secretariat. While unnecessary increases to the salaries of the higher officials have been allowed even beyond the recommendations of the Royal Commission, nothing has been done on its urgent recommendation for the training and larger employment of Indians in the superior grades. The matter requires special attention of the Legislators. Indians are not allowed even the facilities which already exist for mechanical training in the Railway Workshops.

We fully agree with the Committee that Branch lines should as far as possible be constructed and worked by the Main lines. This is more economical than having a separate body to work them. Separate Branch line Companies should be encouraged only in cases where the State is unable or unwilling to provide funds. When financial conditions permit of railway development, Indian States may be called into council and invited to take part in working out a common scheme of development.

The Department of Communications is asked to enquire into the alleged unfair railway competition with inland waterways.

The investigation of gauge question by an expert Commission is recommended, Sir H. P. Burt dissenting from this.

The Committee are unanimous in advising that the system of management by guaranteed Companies of English domicile should not be continued after the termination of their present contracts and that this management by a combination of English and Indian domiciled companies is impracticable, but they are divided as to the relative merits of management by the State and by Indian domiciled companies. The Chairman, the Right Hon'ble Srinivasarao Sastri P.C., Mr. E. A. Hiley C.B.E., Mr. Purshotamdas Thakurdas C. I. E., M. B. E., and Mr. J. Tuke are in favour of direct management by the State, provided the Committee's

recommendations for financial and administrative reforms are substantially adopted. They are opposed to Indian domiciled companies mainly on the broad ground that as a matter of practical politics, companies of substantial independence cannot be formed in India to work the State-owned lines, and that without such independence the advantages claimed for private enterprise are lost. They recommend accordingly that as and when the English guaranteed Companies' contracts fall in, the undertakings should be managed directly by the State. All future capital is to be raised directly by the Central Government. Funds required to put the existing railways into proper shape should be raised even at today's prices as fast as they can be, and economically spent. The immediate raising of capital for *extensions* is not recommended. Government borrowings are to be by ordinary Sterling loans in England and rupee loans earmarked for railway purposes in India.

We congratulate the above named members of the Committee for doing this piece of justice to India. We do not quite approve of large borrowings, especially out of India, nor as stated already do we approve of any enhancement of passenger fares. With the modifications and remarks we have made, we heartily support the recommendations of the majority Committee, and we trust they will be brought into force without delay.

Sir H. P. Burt K.C.I.E., C.B.E., Sir R. N. Mookerjee K.C.I.E., Sir A. R. Anderson Kt. C.I.E., C.B.E., Sir G. C. Godfrey and Sir H. Ledgard are against Government being committed to a policy of State-management only, and recommend the continuance of a system of State and company management side by side, with Indian companies in lieu of English Companies. They accordingly propose a scheme for creating Indian domiciled companies to manage the East Indian, and possibly the Great Indian Peninsular; other lines to be considered on their merits later when the contracts become terminable.

This practically means a continuance of the present Company System, which in practice, in many respects, affects also the systems directly worked by the State. Their administration has

been universally condemned not once but twice, first in 1869 and again now. The readers of this volume will easily see that the guaranteed Companies have no merit to continue their operations in India.

The London correspondent of the *Hindu* of Madras has cabled that the Report of the Committee has caused a flutter in the financial dovecote in London. The British classes, that have hitherto exploited Indian Railways for service and other advantages, are staggered. They know it is well-nigh impossible for the authorities to go against the recommendations of the Chairman. They will, adds the correspondent, try to use some Indian capitalists as their tools. We regretfully mark that Sir R. N. Mookerjee has subscribed to the dissent. We trust Indians will not lend their support to these champions of the company system.

The Minority Committee agree that much capital must be raised directly by the Central Government, but urge also the fullest use of Indian domiciled companies to provide funds from independent sources, no channel through which money can be obtained to be neglected. For instance, further debenture loans through the existing Companies might be negotiated. They agree that money might be raised as fast as it can be, and economically spent but do not wish new developments to be arrested, and consider private enterprise should be enlisted to provide capital for new lines.

We need not consider these proposals seriously.

The Committee is unanimous in other recommendations of the Mackay Committee that in periods of easy money, funds should be raised in excess of immediate requirements.

We do not endorse this, as it is likely to lead to extravagance and unnecessary incurrence of interest.

APPENDIX 1.

ORIGIN OF RAILWAY IN ENGLAND.

THE story of the invention of the iron-road and of the Locomotive Steam Engine and the consequent development of the Railway system, with the wonderful changes, it has produced in the life of the people and conditions of the world, is of a deep interest to mankind. Before we give an account of the Indian Railways, it will be interesting to give a brief sketch of the early history of the rail-road and of the Locomotive in England and of the conditions which prevailed in that country before the advent of the Railway.

Prior to the invention of the railway in England, conditions in that country were much the same as in India, for human nature is much the same all over the world, although we find varying grades, styles, or forms of civilizations in different countries at the same or different times.

We take the following extracts from Volume I of "a History of the English Railway" by John Francis 1851, quoting its pages only from where the matter has been taken.

In the days of dark ages, roads in England were beset with danger and delay. Outlaws dwelling in forests, suddenly came on the traveller deprived him of his all and suddenly retreated with the booty they had won. Long journeys were necessarily performed on horse-back or by coaches which ran 20 miles a day. Markets were inaccessible for months together and fruits of the earth rotted in one place, while a few miles off the supply fell far short of the demand. Coal, manure and grain could only be carried on the backs of cattle (pages 2-5). The roads were also exceedingly tortuous. If the hill which crossed his path were

high, the passenger traversed its base ; if the river were deep, he sought a shallower fording place ; if the path were too rugged, he tried a longer but smoother passage. The travelling merchants . . . moved in company with their fellows. From town to town, through wood and through glade, they wandered in pleasant association, seeking in each other's society mutual aid and mutual protection. Pilgrims also availed themselves of the safety and society of the trader's convoy (pages 6-7).

Streets of London.—The kites, crows and other ravenous birds were the only scavengers of the busy streets. The traffic was comparatively so slight that the mud which collected in the uneven roads proved no inconvenience to shop-keepers. Holborn, the great artery of Modern Babylon, through which pours in quick succession one loud, busy, rattling stream of life and commerce, was not paved till the commencement of the fifteenth century (pages 7-8).

Some of the minor streets were scarcely passable. Narrow lanes, with hedges broken only here and there by a struggling house, were the primitive Wood-streets, Grays In-lanes, and Aldgate-streets of modern times : some would venture to traffic in them in the day but few would risk such perilous thoroughfares at night. Along such dangerous paths the traveller at night had to grope his way about town in total darkness, except he was near enough to be guided by the lanterns on the steeple of Bow Church, which served as the only land-mark to the bewildered stranger (pages 8-9).

London was a great myth to the villager. It was the place where kings reigned and ministers decreed justice, whence wars and rumours of war emanated. Queens died and new dynasties succeeded without the fathers of the village knowing or caring for the change. Their luxuries were from their own vineyard, and their own orchards ; their necessities were the produce of their own farms. Their sons and daughters intermarried, children were

born to them, inheriting their prejudices along with their acres; and had it not been for the gradual improvement in the roads during the eighteenth and nineteenth centuries, the ignorance of the country would have remained unchanged, and the innocence of country life been still an article of faith (pages 12-13).

It was not until the sixteenth century that the roads of England were made the subject of legislative enactment. In the reign of Mary, it was decided that the various parishes should maintain their own roads. Surveyors were chosen, and by means of forced labour, the first step was taken in that fine system which has at once caused and increased the commerce of England (page 9).

In the seventeenth century, further but not very successful efforts were made to improve travelling, and the roads remained eminently bad. The charge of conveyance amounted in many instances to a prohibition (page 13).

Coal, even then, was rarely seen, save in the neighbourhood of the district which produced it. Pack-horses—strong, enduring animals, the breed of which is now extinct—were employed to carry the produce of the weaver's patient skill, the pottery of Staffordshire, and even the coals of New-Castle. Labouring along heavy roads, toiling beneath a burning sun, winding their way through bare, bleak moors, down steep descent, by dangerous rivers, on narrow tongues of land, between masses of mire and mud, so deep as to be dangerous if they entered (a leading horse bearing bells to intimate the approach of the party he heralded), the group formed a most picturesque accompaniment to the wild, weird scenes it enlivened. With such difficulties before them, few persons left their homes but those who were called by some most special reason. Travellers went in fear of their necks, dukes were obliged to walk in muddy roads; and the carriages of reigning princes were only saved from falling by their subjects' support (pages 13-15).

The serious difficulties which beset travelling produced stage coaches, and great was the innovation when in 1659, sanctioned by the doctors of the University of Oxford, the flying coach undertook to perform the journey from that place to London between the rising and the setting of the sun (page 15).*

In April 1706 a stage coach was established between London and York,† doing the single journey in four days. The journey to Cambridge about that period, and probably in a stage coach, was described by a passenger in the following terms:—

“I resolved, since the season of the year proved dry and pleasant to make a short journey to Cambridge. By the time I got to the place of starting, the country tub-driver began to be impatient, all the company, but myself, being already come, and had taken up their stations in the dirty, lumbering, wooden hovel, being more in shape like a tobacco hogs-head than a coach, belling out like the stern of a Dutch fly-boat, and was built more for burthen and the horses’ ease than to commodate travellers. The rest of the company being most of them pretty burly, had made a shift to leave me a nook in the corner in the back part of the coach, not much wider than a chair for a jointed baby.” “In this tub drawn by half-a-dozen bony hacks,” the essayist proceeded, “stopping at Ware, twenty miles from London, to dine, and at Barley, thirty-seven miles off, to sup and sleep; from thence through Saffron Walden, at an ass’s gallop (pages 17-18). He reached Cambridge, a place so abominably dirty that Old Street, in the Middle of a winter’s thaw, or Bartholomew fair after a shower of rain, could not have more occasion for a scavenger than the Miry Streets of this famous corporation, most of them so very narrow that should two wheelbarrows meet in their largest thoroughfare, they are obliged to stop half-an-hour before they can clear themselves of one another.”

* 77 Miles by L. & N. W. Ry., two hours journey by rail.

† Four hours journey by rail.

This was the mode of journeying by coach to and such was Cambridge about the beginning of the eighteenth century.

In 1712 a stage coach service was established between London and Edinburgh, passing Durham, New Castle and Berwick, with a fare of £4-10s. per passenger, the single journey taking 13 days (page 19).†

Highwaymen, another danger incidental to the infancy of locomotion, must not be passed over. Though night-fall saw the traveller duly housed, daylight was often no safeguard against the marauder. A crowded coach was a temptation to an Abershaw. Rash and daring, a bold and skilful horseman, it was no uncommon circumstance for the Claude Duval of the day to attack and rob, single-handed, a stage full of passengers. The arms of the riders were no alarm to him. The coachman stopped his cattle at his approach; the Postilion was often in his pay. He created tremor in the minds of all as they came near his reputed haunts. The gentleman thanked heaven if he escaped a visit on Finchley—common; the lady ejaculated her delight as she passed the confines of Hounslow; the wild heath which graces Shooter's hill was a terror to the traveller; and more fervent prayers were heard for safety on huge, desolate Salisbury plain than were ever breathed in its fine cathedral" (page 26).

"Notwithstanding the establishment of turnpikes on roads in 1763," goes on the chronicler, "it is certain that by 1770 no great improvement had been effected. Language fails to describe the internal roads in Lancashire in that year . . . Ruts four feet deep, floating with mud, were common even in summer: being primitively mended by rolling in large loose stones, which jolted the carriage or broke the springs. It is noticeable that in 18 miles of execrable memory, a traveller passed three carts broken down through these and similar causes; and this was in that Lancashire which encouraged Watt, which enriched Arkwright, which gave the earliest important rail-road to the world, and

† 9. hours journey by Express train in 1911.

which is ever first and foremost in commercial enterprise (pages 27-28).

With the invention of Macadam in 1825 (page 29), the roads in England acquired that perfect condition in which they are found in that beautiful country in the modern days; but the unprecedented revolution in human affairs which is seen there now is not so much due to the improvements in the ordinary roads as to the introduction of the rail-roads, which the geniuses of England have brought about.

Necessity is the mother of invention. It was the requirements of the mining districts, which prompted the people to invent easy roads for the carriage of their mineral produce. Improvements were made gradually step by step. The heavy roads were made easy and smooth for carts by laying rails of timber, *i.e.*, by providing wooden tracks or tram-roads⁽¹⁾ between the years 1602 and 1676. The wooden tracks were replaced by iron-rails, first for the same cart traffic hauled by horses. Later on the steam engine was invented during the latter half of the eighteenth century. About the same time canals were provided for the carriage of goods by water. Among these canals, is the Manchester—Liverpool canal, the power for the construction of which was applied for by the Duke of Bridgewater in 1758 (page 34). About the year 1676 the Marquis of Worcester observed the expansive power of moisture rarified by heat; after many experiments he succeeded in constructing a rude steam engine, which he called a fire-water-work, and which he pronounced to be an admirable and most forcible instrument of propulsion. But the Marquis was suspected to be a madman and known to be a Papist; his invention therefore found no favourable reception (page 43).

(1) The timber wheel tracks obtained the name of trams or tramroads—supposed to have been a popular abbreviation of the name of a Mr. Outram who either originated or at an early date was extensively connected with their employment. Page 222 of "Ways and Works in India by C. W. MacGeorge 1894.

The revolution of 1688, which developed the resources of the English nation in a remarkable degree, was also indirectly the promoter of the rail-road. It gave an impulse to commerce and a security to property. The demand for the produce of the coal mines rendered quick transit important. By 1750 A.D., there was scarcely an important mine which had not its accompanying rail-road. It was tolerably certain that upto 1738 there was no other improvement in the tramroad than in the form or the quality of the wood. The iron way was not even thought of at the time (pages 44-45).

The precise origin of rail-roads is unknown, but the earliest approximation to the modern railway was the wooden tramroad. The first change was from the heavy road to the smooth tram, seeing that the rut of the common way rendered the work of the cattle easier, the people applied that principle to the reduction of labour, and took the initiative in the modern system of rail-roads. Acting on this inspiration, logs of wood, placed in a parallel line, bore the mineral product of the mine to its place of deposit. The idea, though simple was effective, as the horse which previous to this rude tramroad, could only draw 17 Cwts., was enabled after its formation to draw 42 Cwts., without extra fatigue. This change occurred between 1602 and 1649 or 1676. The manner of the carriage was by laying rails of timber, exactly straight and parallel, and bulky carts were made with four rowlets fitting these rails, whereby the carriage was so easy that one horse drew down 4 or 5 Chaldron of coals (pages 41-43).

In 1738 cast iron rails were first substituted for wooden ones, but owing to the old wagons continuing to be employed, which were too heavy for the cast iron, they did not completely succeed on the first attempt. However, about 1768, a simple contrivance was attempted, which was to make a number of smaller wagons and link them together, and, by thus diffusing the weight of one large wagon into many, the principal cause of the failure was removed, because the weight was more divided upon the iron (page 45).

The following description which evidently proves that wood was still in common use, was given of the wooden tramroad in 1765:— "When the road has been traced at six feet in breadth, and where the declivities are fixed, an excavation is made of the breadth of the said road, more or less deep according as the levelling of the road requires. There are afterwards arranged along the whole breadth of the excavation, pieces of Oakwood of the thickness of 4, 5, 6 and even 8 inches square, these are placed across and at the distance of two or three feet from each other; these pieces need only be squared at their extremities, and upon these are fixed other pieces of wood, well squared and sawed, of about 6 or 7 inches breadth, by 5 inches depth, with pegs of wood; these pieces are placed on each side of the road along its whole length; they are commonly placed at four feet distance from each other, which forms the interior breadth of the road" (page 46).

The first piece of wood, measuring six feet long by 4 to 8 inches square, served the purpose of modern sleeper, while the rails were made of 6 or 7 inches width and 5 inches depth, the interior of the road being 4 feet between the rails.

In 1765 the common rail-road was of wood, but from 1767 the idea of using iron rails was practically entertained. According to Robert Stephenson, cast iron rails were first made in the great iron works at Colebrook Dale in Shropshire and six tons of rails were cast there on the 13th November 1767 as an experiment. A claim to this novelty was made also by Curr, who said that the making and use of iron rail-roads were among his first inventions and were introduced into the Sheffield Colliery about the year 1776 (page 47).

By 1776 the discovery of steam had been variously applied, and reflective men were employed on that power which had been pioneered by Dr. Black's discovery of the power of latent heat, and which Watt rendered applicable by experiments which

attained an uninterrupted supply of steam and a continuous rotary motion.

In 1759 he was engaged in forming an engine and in 1769 he expressly mentioned the possibility of applying the steam engine to domestic improvement. By 1787 the discovery had so far proceeded that Mr. Symington, who had claims to the invention of the steam-boat, exhibited the model of a steam carriage in Edinburgh, at the house of Mr. Gilbert Meason. In 1802 Mr. Trevithick took out a patent for an invention and brought into use a machine of this nature on the rail-road of Merthyr Tydvil in South Wales, and the first locomotive in England was then and there employed for a short time (pages 48—49).

The first locomotive therefore was first in use in 1804 on a Welsh Railway, drawing as many carriages as would contain ten tons of bar iron, at the rate of 5 miles an hour. The principle was perfect, the triumph was complete, a locomotive was in absolute work, and yet for years was the fallacy established in men's minds as fixedly as an article of faith that it could not draw heavy loads, that the adhesion of the smooth wheels of the carriage to the smooth rails of the iron must be so slight that though the wheels would move round, the carriage would not move with them. There was no doubt of this imaginary defect in the minds of scientific persons. Men published treatises, formed plans, made new discoveries, argued, wrote, pleaded and finally took out patents to overcome a difficulty which had no existence save in their own minds. Mr. Trevithick endeavoured to provide for it by certain projections in his wheels. Mr. Blenkinsop was granted a patent. One gentleman tried to form machinery which should imitate the action of the hind legs of a horse, while another was nearly successful in producing both the fore and hind legs, when in 1811 the important difficulty was partially overcome; and Mr. Blenkinsop of Middleton Colliery conveyed coals, by the aid of engines with toothed-wheels worked

into a tooth-rack. This plan was very objectionable but as it surmounted the fancied evil, great were the rejoicings. In only two years after, the evil itself was discovered to be a figment of the brain, and the efforts to overcome it a waste of time (pages 50—51).

To Mr. Blackett of Wylam Railway, the credit was due of destroying that theory. Being in possession of one of Trevithick's engines, he acted like a sensible man, formed another of greater power, similar to it, and then tested its capacity. To his delight he found that nature was not at fault but that, by virtue of one of her beautiful and unerring laws, the carriage actually moved rapidly along the road, however great the weight (pages 51—52).

Experiments were made in various places, the nature of the machinery was more perfectly comprehended; its operations were better understood. Constant experience suggested successive experiments, and on the Lillingworth railway, on 25th July 1814, with an engine constructed under the superintendence of George Stephenson, was the triumphant success of the principle proved, by a carriage moving on a slight ascent, drawing after it eight loaded carriages, all weighing 20 tons. The principal improvement made was the introduction of two cylinders instead of one, which acting at different portions of the wheels, produced a more regular motion and abolished a fly-wheel previously used. Lord Ravensworth was called a fool for advancing the money and Mr. Stephenson laughed at as a coxcomb, for attempting that which others in their superior wisdom declared impossible. Mr. Stephenson, however, declared that there was no limit to the speed of such an engine, provided the works could be made to stand. His first engine was named "My Lord" (pages 52-53).

The first railway opened for public traffic is the Liverpool-Manchester line, the first iron road on which the locomotive was used as the moving power for the carriage of passengers. Its

Engineer was Mr. Stephenson, its originator was Mr. Edward Pease (pages 53-54).

The first iron road was established in 1801 from Wandsworth to Croydon with a branch to Carshalton—about 9 miles in length. Upto 1825 there were 29 railways of short lengths with a total mileage of about 400 miles (pages 56-64).

In addition to the social advantages which accrued from increased communication, there were the development of commerce and the increased importance of the various places through which it passed. A new trade in lime arose; the price of coal fell from 18s. to 8s. 6d (page 56).

It is evident that the facilities of the tram-road were brought into use from the beginning of the seventeenth century; that the power of steam was known and applied in the eighteenth century and the iron road was commenced from about the middle of the latter century.

Each line diminished labour, increased profits and lowered prices.

Improvements in appliances have been continually made, enterprising men joined their capital together, money of the commercial man and the mind of the inventive genius were employed to produce the desired results. From the year 1830 every year and almost month, witnessed some improvement either in the road, in the carriages, the engines or safety appliances. Nor must it be imagined that a finality in railway improvements has even yet been achieved.

APPENDIX 2.

Direct Financial Results of the transactions connected with the old Guaranteed Railways in India from commencement to the year 1882-83 as per India Office Statement printed at page 706 of the Report of the Select Committee on Indian Railways of 1884, with 4 per cent. per annum simple interest.

Year.	Net Traffic Receipts.	CHARGES.			Net Charge (Cols. 5 minus 2.)	Simple interest at 4% per annum up to 31st March 1917 on column 6.	Number of years up to 31st March 1917.
		Interest on Capital, Surplus profits, Supervision, and cost of land.	Loss by Exchange on Capital transactions.	Total.			
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1848-49 ...	...	...	—1,22,485	—1,22,485	—1,22,485	—3,33,159	68
1849-50 ...	...	92,437	—1,66,122	—73,685	—73,685	—1,97,476	67
1850-51 ...	...	2,35,457	4,496	2,39,953	2,39,953	6,33,476	66
1851-52 ...	...	5,37,725	1,33,305	6,71,030	6,71,030	17,44,678	65
1852-53 ...	...	6,88,927	2,00,131	8,89,058	8,89,058	22,75,988	64
1853-54 ...	77,695	8,69,858	3,78,785	12,48,643	1,17,09,48	2,950,789	63
1854-55 ...	1,54,342	15,68,625	—3,34,722	12,33,903	1,07,95,61	26,77,311	62
1855-56 ...	6,52,658	36,62,464	12,47,768	49,10,232	4,25,75,74	1,03,88,480	61
1856-57 ...	12,68,520	60,43,560	16,25,140	76,68,700	6,40,01,80	1,53,60,432	60
1857-58 ...	16,39,658	72,43,770	22,89,948	95,33,718	7,89,40,60	1,86,29,982	59
					2,24,06,154		
1858-59 ...	21,31,200	92,72,446	31,95,343	1,24,67,789	1,03,36,589	2,39,80,886	58
1859-60 ...	43,96,985	1,53,23,376	42,21,645	1,95,45,021	1,51,48,036	3,45,37,522	57

1860-61	...	42,48,142	1,58,94,408	46,86,874	2,05,81,282	1,63,33,140	3,65,86,234	56
1861-62	...	42,67,222	1,91,51,299	41,67,274	2,33,18,573	1,90,51,351	4,19,12,972	55
1862-63	...	68,24,890	2,30,77,127	34,60,064	2,65,37,191	1,97,12,301	4,25,78,570	54
1863-64	...	89,62,340	2,68,55,799	27,74,279	2,96,30,078	2,06,67,738	4,38,15,605	53
1864-65	...	1,23,25,650	3,07,35,622	23,65,041	3,31,00,663	2,07,75,013	4,32,12,027	52
1865-66	...	3,12,65,630	3,14,48,577	29,78,677	3,44,27,254	31,61,624	644,9,713	51
1866-67	...	2,46,92,340	3,50,26,979	18,14,595	3,68,41,574	1,21,49,234	2,42,98,468	50
1867-68	...	2,25,04,540	3,82,29,623	9,68,084	3,91,97,707	1,66,93,167	3,27,28,607	49
1868-69	...	2,44,00,600	4,28,79,997	5,75,790	4,34,55,787	1,90,55,187	3,65,85,959	48
1869-70	...	2,93,70,400	4,42,38,214	13,18,013	4,55,56,227	1,61,85,827	3,04,29,603	47
1870-71	...	2,86,28,620	4,77,64,577	-6,34,674	4,71,29,903	1,85,01,283	3,40,42,361	46
1871-72	...	3,18,80,890	4,78,31,940	1,85,181	4,80,17,121	1,61,36,231	2,90,45,216	45
1872-73	...	2,86,03,770	5,09,88,120	-1,92,850	5,07,95,270	2,21,91,500	3,90,57,040	44
1873-74	...	3,61,31,140	5,18,69,740	-3,91,954	5,14,77,786	1,53,46,646	2,63,96,231	43
1874-75	...	4,13,15,640	5,48,18,850	-1,26,096	5,46,92,754	1,33,77,114	2,24,73,552	42
1875-76	...	4,25,93,200	5,43,54,760	9,73,164	5,53,27,924	1,27,34,724	2,08,84,947	41
1876-77	...	5,08,76,410	5,77,33,160	19,45,360	5,96,78,520	88,02,110	1,40,83,376	40
1877-78	...	6,59,34,590	6,18,07,210	-23,118	6,17,84,092	-41,50,498	-64,74,777	39
1878-79	...	5,20,13,060	6,60,96,890	12,63,839	6,73,60,729	1,53,47,669	2,33,28,457	38
1879-80	...	4,62,25,840	6,37,68,900	-11,14,474	6,26,54,426	1,64,28,586	2,01,74,297	37
1880-81	...	2,91,33,130	4,33,48,210	-1,28,469	4,32,19,741	1,40,86,611	2,02,84,720	36
1881-82	...	3,61,56,250	4,35,12,610	8,53,420	4,43,66,030	82,09,780	1,14,93,692	35
1882-83	...	3,58,20,460	4,63,39,340	-7,76,356	4,55,62,984	97,42,524	1,32,49,832	34
Total	...	70,44,95,812	1,04,33,10,597	3,96,14,896	1,08,29,25,493	37,84,29,681	71,92,85,611	...

NOTE.—1877-78 was the only year in which the Guaranteed Railway showed a profit, while in all the other years of their working, they incurred losses. In 1877-78 the extraordinary result was due to the large income made from the famine traffic and from traffic to and from the Delhi Durbar of 1877.

APPENDIX 3.

AIX

True Financial Results to the Revenues of India of the guarantee of interest upon the Capital of Guaranteed Railway Companies as per Table of Commercial and Financial Statistics appended to the annual Financial Statements of the Government of India, with 4 per cent. per annum simple interest.

Year.	Open Mileage at end of official year.	Gross Traffic Receipts.	EXPENDITURE.							Net loss to the State (columns 3 minus 10)	Simple interest at 4 per cent., per annum up to 31st March 1917 on net loss.	Number of years up to 31st March 1917.	Percentage of working expenses on gross traffic receipts.
			Working Expenses.	Guaranteed interest.	Companies' share of surplus profits.	Land and Supervision.	Interest on Revenue Balances.	Loss by Exchange.	Total (columns 4 to 9.)				
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Miles.	In Thousands of Rupees.											
1883-84	4,636	7,83,60	4,14,79	4,04,72	56,99	6,73	19	8,67	8,92,10	1,08,49	1,43,28	33	52.86
1884-85	4,528	7,60,67	4,12,84	4,02,87	43,15	6,15	19	—10	8,65,08	1,04,41	1,33,65	32	54.27
1885-86	3,921	7,80,95	4,08,45	4,23,17	39,71	6,96	14	4,80	8,84,23	1,03,27	1,28,06	31	52.30
1886-87	3,896	7,28,05	3,63,34	3,72,19	53,46	6,62	18	11,53	8,07,33	79,28	95,13	30	49.91
1887-88	3,912	7,24,15	3,60,48	3,85,29	66,26	5,14	23	7,87	8,25,27	1,01,13	1,17,31	29	49.78
1888-89	3,241	7,40,34	3,75,26	3,95,91	50,72	4,43	33	8,69	8,41,65	1,01,30	1,13,46	28	50.68
1889-90	3,243	6,53,46	3,36,59	3,39,53	44,19	3,10	...	14,27	7,37,68	84,23	90,96	27	51.50
1890-91	2,588	6,75,30	3,25,17	3,13,09	47,33	4,30	...	8,75	6,98,65	23,35	24,29	26	48.15
1891-92	2,588	6,84,64	3,35,33	3,06,94	73,77	1,93	...	13,20	7,31,16	46,52	46,52	25	48.98
1892-93	2,587	6,30,19	3,05,75	3,43,86	58,19	2,94	...	14,54	7,25,29	95,10	91,29	24	48.52
1893-94	2,587	6,46,10	3,07,72	3,55,75	57,13	3,40	...	13,35	7,37,35	91,25	83,95	23	47.63

1894-95	2,587	6,12,42	3,07,39	3,95,38	60,07	3,15	...	7,43	7,73,41	1,60,99	1,41,67	22	50.19
1895-96	2,587	6,25,51	2,97,99	3,80,67	50,15	2,88	...	8,73	7,20,68	1,14,90	96,52	21	47.64
1896-97	2,588	5,68,52	3,05,10	3,59,72	44,73	2,81	...	8,31	6,82,70	1,52,16	1,21,83	20	53.67
1897-98	2,588	5,41,46	3,21,32	3,37,71	11,03	1,59	...	11,05	7,13,02	1,41,24	1,07,34	19	59.34
1898-99	2,588	6,38,10	3,29,83	3,25,20	36,18	3,64	...	18,17	7,38,30	74,92	5,39,4	18	51.69
1899-00	2,612	6,26,02	3,39,93	3,25,85	42,04	9,47	...	21,02	4,45,76	1,12,30	76,36	17	54.30
1900-01	1,305	3,78,26	1,80,73	2,38,41	25,82	-16	...	97	2,99,43	67,50	43,20	16	47.78
1901-02	1,334	2,65,90	1,28,65	1,51,43	23,16	-1,01	...	-2,80	3,10,75	33,54	20,12	15	48.38
1902-03	1,349	2,82,67	1,40,74	1,54,03	13,34	-95,96	...	3,60	3,36,49	28,09	15,73	14	49.79
1903-04	1,408	2,99,01	1,57,79	1,54,92	15,28	3	...	8,47	3,43,94	37,47	19,49	13	52.77
1904-05	1,408	3,23,13	1,61,91	1,57,10	19,08	1,13	...	4,72	3,25,62	20,81	9,99	12	50.11
1905-06	904	2,81,37	1,43,08	1,57,94	17,73	1,20	...	5,66	1,92,81	44,25	19,47	11	50.85
1906-07	904	1,52,03	92,21	87,71	9,05	-2,80	...	6,63	1,92,81	40,77	16,30	10	60.65
1907-08	905	1,17,53	83,24	86,49	1,29	47	...	59	1,72,08	54,55	19,64	9	70.82
1908-09	...	4	18	...	1,83	86	...	4	2,14	2,10	67	8	...
1909-10	...	...	...	...	-97	...	...	...	-97	-97	-17	7	...
to 1913-14	...	...	...	...	...	...	...	...	...	...	...	...	...
Total 1883-84 to 1913-14.	...	1,35,19,43	69,85,81	73,55,89	9,67,03	74,23	1,25	2,08,16	1,55,42,38	20,22,95	18,29,94		
Total from 1848-49 to 1882-83.	...	70,44,96*	*		1,04,33,11		...	3,96,15	1,08,29,25	3,78,4,29	71,92,85		
Grand Total for entire period.	...	2,05,64,39	...	...	...	...	...	...	2,63,71,63	58,07,24	90,22,79		

* The figure given in column 8 represents net traffic receipts after deduction of the working expenses from the gross traffic receipts.

(a) The Bellary Branch of the Madras Railway 33 miles, transferred to the S. M. Railway.

(b) The S. P. & D. Railway 691 miles, purchased by the State on 1st January 1886.

APPENDIX 3A.

Total loss borne by the Revenue of India on account of the old Guaranteed Railway Companies with 4 per cent. per annum Compound interest.

XXVI

INDIAN RAILWAYS.

Year.			Net loss during each year as per Statements Nos. 2 & 3.	Interest at 4 per cent, per annum on the total loss at end of previous year.	Total loss including interest at end of each year.	
1			2	3	4	
			Rs.	Rs.	Rs.	
1848-49	...	...	—1,22,485	.....	—1,22,485	
1849-50	...	...	—73,685	—4,899	—2,01,069	
1850-51	...	...	2,39,953	—8,043	30,841	
1851-52	...	...	6,71,030	1,234	7,03,105	
1852-53	...	...	8,89,058	28,124	16,20,287	
1853-54	...	...	11,70,948	64,811	28,56,046	
1854-55	...	...	10,79,561	1,14,242	40,49,849	
1855-56	...	...	42,57,574	1,61,994	84,69,417	
1856-57	...	...	64,00,180	3,38,777	1,52,08,374	
1857-58	...	...	78,94,060	6,08,335	2,37,10,769	
1858-59	...	...	1,03,36,589	9,48,431	3,49,95,789	
1859-60	...	...	1,51,48,036	13,99,832	5,15,43,657	
1860-61	...	...	1,63,33,140	20,61,746	6,99,38,543	
			6,42,23,959	57,14,584	6,99,38,343	
1861-62	...	...	1,90,51,351	27,97,542	9,17,87,436	
1862-63	...	...	1,97,12,301	36,71,497	11,51,71,234	
1863-64	...	...	2,06,67,738	46,06,849	14,04,45,821	

1864-65	...	...	2,07,75,013	56,17,833	16,68,38,667
1865-66	...	...	31,61,624	66,73,547	17,66,73,838
1866-67	...	...	1,21,49,234	70,66,954	19,58,90,026
1867-68	...	...	1,66,93,616	78,35,601	22,04,18,794
			17,64,34,387	4,39,84,407	22,04,18,794
1868-69	...	...	1,90,55,187	88,16,752	24,82,90,733
1869-70	...	...	1,61,85,827	99,31,629	27,44,08,189
1870-71	...	...	1,85,01,283	1,09,76,327	30,38,85,799
			23,01,76,684	7,37,09,115	30,38,85,799
1871-72	...	...	1,61,36,231	1,21,55,432	33,21,77,462
1872-73	...	...	2,21,91,500	1,32,87,098	36,76,56,060
1873-74	...	...	1,53,46,646	1,47,06,242	39,77,08,948
1874-75	...	...	1,33,77,114	1,59,08,358	42,69,94,420
1875-76	...	...	1,27,34,724	1,70,79,776	45,68,08,920
1876-77	...	...	88,02,110	1,82,72,356	48,38,83,386
1877-78	...	...	—41,50,498	1,93,55,335	49,90,88,223
1878-79	...	...	1,53,47,669	1,99,63,528	53,43,99,420
1879-80	...	...	1,64,28,586	2,13,75,976	57,22,03,982
1880-81	...	...	1,40,86,611	2,28,88,159	60,91,78,752
			86,04,77,377	24,87,01,375	60,91,78,752
1881-82	...	...	82,09,780	2,43,67,150	64,17,55,682
1882-83	...	...	97,42,524	2,56,70,227	67,71,68,433
1883-84	...	...	1,08,49,220	2,70,86,737	71,51,04,390
1884-85	...	...	1,04,41,350	2,86,04,176	75,41,49,916
1885-86	...	...	1,03,27,390	3,01,65,997	79,46,43,303
Carried over	...	...	41,00,47,641	38,45,95,662	79,46,43,303

APPENDIX 3A.—(Continued.)

Total loss borne by the Revenue of India on account of the old Guaranteed Railway Companies
with 4 per cent. per annum Compound interest.

xviii

INDIAN RAILWAYS.

Year.	Net loss during each year as per Statement No. 3.	Interest at 4 per cent. per annum on the total loss at end of previous year.	Total loss including interest at end of each year.	
1.	2	3	4	
	Rs.	Rs.	Rs.	
Brought forward ...	41,00,47,641	38,45,95,662	79,46,43,303	
1886-87 ...	79,27,520	3,17,85,732	83,43,56,555	
1887-88 ...	1,01,12,830	3,33,74,262	87,78,43,647	
1888-89 ...	1,01,30,360	3,51,13,746	92,30,87,753	
1889-90 ...	84,22,630	3,69,23,510	96,84,33,893	
1890-91 ...	23,35,260	3,87,37,359	1,00,95,06,512	
	44,89,76,241	56,05,30,271	1,00,95,06,512	
1891-92 ...	46,51,880	4,03,80,260	1,05,45,38,652	
1892-93 ...	95,09,520	4,21,81,546	1,10,62,29,718	
1893-94 ...	91,24,870	4,42,49,179	1,15,96,03,767	
1894-95 ...	1,60,99,407	4,63,84,151	1,22,20,87,325	
1895-96 ...	1,14,90,185	4,88,83,493	1,28,24,61,003	
1896-97 ...	1,52,16,002	5,12,98,440	1,34,89,75,445	
1897-98 ...	1,41,23,676	5,39,59,018	1,41,70,58,139	
1898-99 ...	74,92,306	5,66,82,326	1,48,12,32,771	

1899-1900 ...	1,12,29,754	5,92,49,311	1,55,17,11,836
1900-01 ...	67,50,285	6,20,68,473	1,62,05,30,594
	55,46,64,126	1,06,58,66,468	1,62,05,30,594
1901-02 ...	33,53,635	6,48,21,224	1,68,87,05,459
1902-03 ...	28,08,815	6,75,48,218	1,75,90,62,486
1903-04 ...	37,47,247	7,03,62,499	1,83,31,72,232
1904-05 ...	20,80,823	7,33,26,889	1,90,85,79,944
1905-06 ...	44,24,354	7,63,43,198	1,98,93,47,496
1906-07 ...	40,77,335	7,95,73,900	2,07,29,98,731
1907-08 ...	54,54,854	8,29,19,949	2,16,19,73,534
1908-09 ...	2,10,025	8,64,54,941	2,24,80,38,500
1909-10 ...	—26,456	8,99,21,540	2,33,79,33,584
1910-11 ...	—10,642	9,35,17,343	2,43,14,40,285
	58,07,84,116	1,85,06,56,169	2,43,14,40,285
1911-12 ...	.....	9,72,57,611	2,52,86,97,896
1912-13 ...	.....	10,11,47,916	2,62,98,45,812
1913-14 ...	—59,707	10,51,93,832	2,73,49,79,937
1914-15 ...	.....	10,93,99,197	2,84,43,79,134
1915-16 ...	.....	11,37,75,165	2,95,81,54,299
1916-17 ...	.....	11,83,26,172	3,07,64,80,471
1917-18 ...	.....	12,30,59,219	3,19,95,39,690
	58,07,24,409	2,61,88,15,281	3,19,95,39,690
1918-19 ...	.....	12,79,81,587	3,32,75,21,277
1919-20 ...	.....	13,31,00,851	3,46,06,22,128
Total ...	58,07,24,409	2,87,98,97,719	3,46,06,22,128

APPENDIX 4.—Purchase of old Guaranteed Railways by Government. See Section 6 of Chapter III.

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APPENDIX 4

Name of Company.	Length of line in miles.	Date of purchase.	Capital subscribed by Company.		Rate p.c. on share capital.	Purchase Price for share Capital.	
			Share.	Debenture.		Total Price.	How discharged.
	Miles.		Pounds.	Pounds.		Pounds.	Pounds.
East Indian ...	1,504	31-12-79	26,200,000	4,450,000	125	32,750,000	By India Stock 7,282,366
Eastern Bengal ...	160	1-7-84	2,255,480	1,023,658	150-38½	3,391,917	" Annuity 25,467,634
S. P. & D. ...	737	1-1-86	11,075,320	.....	126-49	14,009,124	" India Stock 542,070
Oudh & Rohilkhand	548	1-1-89	4,000,000	5,300,000	125-9012	5,036,049	" Annuity 2,849,847
South Indian ...	655	1-1-91	3,208,280	1,495,000	131-0116	4,197,557	" India Stock 4,911,216
					for 5% shares		" Annuity 9,097,908(a)
					124-558½ for		" 3% India Stock.
					4½ % shares.		" India Stock 3,197,557
G. I. P. ...	1,288	1-7-1900	20,000,000	5,922,350	174-296	34,859,218	" Capital deposited by new Company 1,000,000
							By Annuity 33,109,218(b)
							" New Company Stock 1,750,000
							in exchange for part of annuity of £67,047,17s. 9d.
B. B. & C. I. ...	461	31-12-05	8,745,056	2,391,300	133-625	11,685,581	By India Stock 9,685,581
							" New Company Stock 2,000,000
Madras ...	905	1-1-08	10,257,630	2,144,600	124-977	12,819,558	By Annuity 11,319,558
							" New Company Stock 1,500,000
Total ...	6,258	...	85,741,766	22,726,908	138-49	118,749,004	

(a) Annuity of £4-1-7 6398 per cent.

(b) Annuity of £368,516 payable up to 17th August 1948.

APPENDIX 5.

**Charges borne by General Revenues of India on account
of the Subsidized Railway Companies, *vide* Heads
H-40 and H-XXVIII, in the abstracts of Expen-
diture and Revenue of the Government
of India.**

APPENDIX

*Charges borne by General Revenues of India on account of the
in the abstracts of Expenditure and*

Year.	Cost of land, advances of interest, etc., as per Head H 40.			Repayment of advances profits, etc.,	
	Imperial.	Provincial.	Total.	India.	Eng- Pounds.
	Rs.	Rs.	Rs.	Rs.	Pounds.
1881-82	1,56,506	...	1,56,506	...	...
1882-83	3,82,689	...	3,82,689	...	...
1883-84	8,55,000	...	8,55,000	...	...
1884-85	8,42,000	...	8,42,000	...	...
1885-86	2,72,760	1,68,490	4,41,250	1,190	...
1886-87	c. 3,06,800	1,45,630	4,52,430	16,160	...
1887-88	2,90,110	1,46,160	4,36,270	2,47,640	...
1888-89	1,36,320	1,44,890	2,80,710	4,27,680	...
1889-90	5,45,570	1,45,730	6,91,300	4,90,120	63
	37,87,755	7,50,400	45,38,155	11,82,790	63
1890-91	2,16,620	1,46,260	3,62,880	3,05,050	735
1891-92	1,89,240	1,42,060	3,31,300	3,15,670	£995
					R. 432
1892-93	1,23,830	1,66,430	2,90,260	1,78,830	...
1893-94	67,660	1,42,340	2,10,000	3,40,540	...
1894-95	26,050	1,40,890	1,66,940	4,16,940	...
1895-96	81,340	1,01,170	1,82,510	2,52,520	...
1896-97	7,49,570	1,00,630	8,50,200	2,40,520	...
1897-98	10,35,770	1,01,830	11,37,600	1,29,900	1,266
1898-99	9,42,140	1,01,910	10,44,050	4,87,150	296
1899-1900	5,31,339	40,094	5,71,433	3,95,755	1,023d
	77,51,314	19,34,014	96,85,328	41,95,665	4,810
1900-01	2,59,359	1,854	2,61,213	3,20,134	1,591
1901-02	1,99,562	2,049	2,01,611	4,85,876	1,361
1902-03	6,31,098	2,096	6,33,194	4,82,880	17,870
1903-04	4,49,953	7,537	4,57,490	4,88,845	7,222
1904-05	7,49,583	3,965	8,53,548	5,66,840	9,525
1905-06	4,59,489	99,495	5,58,984	3,71,618	17,853
1906-07	4,31,378	86,009	5,17,387	3,88,746	30,272
1907-08	2,03,408	17,323	2,20,731	2,08,839	38,683
Carried over	1,11,35,144	21,54,342	1,32,89,486	75,09,443	129,187

3.

*Subsidized Railway Companies, vide Heads H-40 and H-XXVIII,
Revenue of the Government of India.*

Interest, Surplus Head H-XXVIII.		Net charge.	Interest at 4 % per annum on balance outstanding.	Balance out- standing at end of each year.
land.	Total.			
Equi- valent in Rs				
R.s.	R.s.	R.s.	R.s.	R.s.
...	...	a. { 1,56,506	...	1,56,506
...	...	3,82,689	6,260	5,45,455
...	...	8,55,000	21,818	14,22,273
...	...	b. { 8,42,000	56,891	23,21,164
...	1,190	4,40,060	92,847	28,54,071
...	16,160	4,36,270	1,14,163	34,04,504
...	2,47,640	1,88,630	1,36,180	37,29,314
...	4,27,680	-1,46,970	1,49,173	37,31,517
910	4,91,030	2,00,270	1,49,261	40,81,048
910	11,83,700	33,54,455	7,26,593	40,81,048
9,750	3,14,800	48,080	1,63,242	42,92,370
14,270	3,29,940	1,360	1,71,695	44,65,425
...	1,78,830	1,11,430	1,78,617	47,55,472
...	3,40,540	-1,30,540	1,90,219	48,15,151
...	4,16,940	-2,50,000	1,92,606	47,57,757
...	2,52,520	-70,010	1,90,310	48,78,057
...	2,40,520	6,09,680	1,95,123	56,82,860
19,790	1,49,690	9,87,910	2,27,315	68,98,085
4,450	4,41,600	6,02,450	2,75,924	77,76,459
15,345	4,11,100	1,60,333	3,11,059	82,47,851
64,515	42,60,180	54,25,148	28,22,703	82,47,821
23,865	3,43,999	-82,786	3,29,914	84,94,979
20,415	5,06,291	-3,04,680	3,39,799	85,30,098
2,68,050	7,50,930	-1,17,736	3,41,204	87,53,566
1,08,330	5,97,175	-1,39,685	3,50,143	89,64,024
1,42,875	7,09,715	43,833	3,58,561	93,66,418
2,67,795	6,39,413	-80,429	3,74,657	96,60,646
4,54,080	8,42,826	-3,25,439	3,86,426	97,21,683
5,80,245	7,89,084	-5,68,353	3,88,865	95,42,145
19,30,170	94,39,613	38,49,873	56,92,272	95,42,145

APPENDIX

*Charges borne by general revenues of India on account of the
in the abstracts of Expenditure and*

Year.	Cost of land, advances of interest, etc., as per Head H.-40.			Repayment of advances, profits etc.	
	Imperial.	Provincial.	Total.	India.	Eng- Pounds.
	Rs.	Rs.	Rs.	Rs.	Pounds.
Brought forward...	1,11,35,144	21,54,342	1,32,89,486	75,09,443	129,187
1908-09	10,19,065	43,916	10,62,981	2,39,585	56,231
1909-10	5,87,818	18,359	6,06,177	2,20,641	43,587
	1,27,42,027	22,16,617	1,49,58,644	79,69,669	229,005
1910-11	3,79,498	44,616	4,24,114	2,03,920	25,751
1911-12	8,96,204	13,190	9,09,394	1,92,296	44,825
1912-13	4,91,071	14,031	5,05,102	2,35,088	57,501
1913-14	7,88,791	38,396	8,27,187	2,44,967	76,770
1914-15	14,69,850	...	14,69,850	3,50,940	47,295
1915-16	24,30,669	9,965	24,40,634	2,98,385	71,522
1916-17	24,23,158	13,603	24,36,761	4,37,631	69,560
1917-18	9,50,814	10,107	9,60,921	3,52,757	70,479
	2,25,72,082	23,60,525	2,49,32,607	1,02,85,653	692,698
1918-19	3,01,684	10,112	3,11,796	1,78,845	94,344
1919-20	3,61,973	10,112	3,72,085	1,93,470	218,088
Total ...	2,32,35,739	23,80,749	2,56,16,488	1,06,57,968	1,005,130

- a. Taken from page 706 of Report of Select Committee of 1884.
- b. See Section H, para. 120 of Appropriation Report on the Accounts of India for 1885-86.
- c. The figures for columns 2 to 8 have been extracted from the Annual Accounts of the Government of India. Column 9 represents the difference between columns 4 and 8. The figures in columns 10 and 11 have been worked out by the compiler.
- d. From 1899-1900 pounds were converted at Rs. 15 each.

5—(Continued.)

*Subsidized Railway Companies, vide Heads H-40 and H-XXVIII
Revenue of Government of India.*

ces of interest, Surplus Head H. XXVIII.		Net charge.	Interest at 4 per cent. per annum on balance outstanding.	Balance out- standing at end of each year.
land.	Total.			
Equi- valent in Rs				
Rs.	Rs.	Rs.	Rs.	Rs.
19,30,170	94,39,613	38,49,873	56,92,272	95,42,145
8,43,465	10,83,050	—20,069	3,81,686	99,03,762
6,53,805	8,74,446	—2,68,269	3,96,150	1,00,31,643
34,27,440	1,13,97,109	35,61,535	64,70,108	1,00,31,643
3,86,265	5,90,185	—1,66,071	4,01,266	1,02,66,838
6,72,375	8,64,671	44,723	4,10,674	1,07,22,235
8,62,515	10,97,603	—5,92,501	4,28,890	1,05,58,624
11,51,550	13,96,517	—5,69,330	4,22,345	1,04,11,639
7,09,425	10,60,365	4,09,485	4,16,466	1,12,37,590
10,72,830	13,71,215	10,69,419	4,49,504	1,27,56,513
10,43,400	14,81,031	9,55,730	5,10,261	1,42,22,504
10,57,035	14,09,792	—4,48,871	3,80,380	1,41,54,013
1,03,82,835	2,06,68,488	42,64,119	98,89,894	1,41,54,013
14,15,160	15,94,005	—12,82,209	5,66,160	1,34,37,964
32,71,320	34,64,790	—30,92,705	5,37,518	1,08,82,777
1,50,69,315	2,57,27,283	—1,10,795	1,09,93,572	1,08,82,777

APPENDIX 6.

Miscellaneous Railway Expenditure, Head H-41 in the Abstract of Expenditure of the Government of India.

Year.	Imperial.	Provincial.	Local.	Total.
	Rs.	Rs.	Rs.	Rs.
1883-84	26,75,370	(¹)—47,33,670	...	(²)—20,58,300
1884-85	37,77,110	10,74,330	...	(²) 48,51,440
1885-86	9,12,350	80,390	...	9,92,740
1886-87	8,12,700	1,31,290	...	9,43,990
1887-88	4,25,980	92,490	...	5,18,470
1888-89	5,43,980	1,62,360	...	7,06,340
1889-90	12,92,310	1,98,930	...	14,91,240
1890-91	11,90,800	3,01,170	...	14,91,970
	1,16,30,600	—26,92,710	...	89,37,890
1891-92	8,02,230	1,18,370	...	9,20,600
1892-93	1,08,600	.....	...	—1,08,600
1893-94	10,22,530	11,860	...	10,34,390
1894-95	10,11,040	—7,440	...	10,03,600
1895-96	7,16,230	260	...	7,16,490
1896-97	6,36,900	2,110	...	6,39,010
1897-98	1,54,750	7,540	...	1,62,290
1898-99	5,48,420	—5,050	...	5,43,370
1899-1900	6,34,671	4,571	...	6,39,242
1900-01	7,04,061	17,700	...	7,21,761
	1,77,52,832	—25,42,789	...	1,52,10,043
1901-02	10,72,997	1,12,773	...	11,85,770
1902-03	7,89,597	85,447	8,803	8,83,847
1903-04	7,21,235	85,285	9,096	8,15,616
1904-05	6,38,164	77,502	8,103	7,23,769
1905-06	4,89,263	19,639	23,819	5,32,721
1906-07	5,84,037	8,613	20,379	6,13,029
Carried over	2,20,48,125	—21,53,530	70,200	1,99,64,795

APPENDIX 6—(Continued.).

Miscellaneous Railway Expenditure, Head H-41 in the Abstract of Expenditure of the Government of India.

Year.	Imperial.	Provincial.	Local.	Total.
	Rs.	Rs.	Rs.	Rs.
Brought forward	2,20,48,125	—21,53,530	70,200	1,96,64,795
1907-08	12,10,766	16,197	105	12,27,068
1908-09	2,93,969	82,777	...	3,76,746
1909-10	5,40,198	20,601	...	5,60,799
1910-11	4,78,990	8,184	...	4,87,174
	2,45,72,048	—20,25,771	70,305	2,26,16,582
1911-12	2,62,400	10,100	...	2,72,560
1912-13	9,86,632	3,999	...	9,90,631
1913-14	—6,87,945	—465	...	—6,88,410
1914-15	13,08,375	.....	...	13,08,375
1915-16	2,55,889	14,424	...	2,70,313
1916-17	43,657	14	...	43,671
1917-18	7,95,692	297	...	7,95,989
	2,75,36,748	—19,97,342	70,305	2,56,09,711
1918-19	44,24,379	571	...	44,24,950
1919-20	80,64,357	1,059	...	80,65,416
	4,00,25,484	—19,95,712	70,305	3,81,00,077

(1) Writes-back of expenditure incurred up to 1882-83 upon four Provincial Railways which were subsequently classed as Productive.

(2) State Ry. —39 43,270
S. M. Ry. 8,55,680
Frontier Railways 10,29,290
Total ...—20,58,300

(3) State Rys. 19,50,910
S. M. Ry. 15,13,530
Frontier Railways 13,87,000
Total ... 48,41,440

STATEMENT 7.

*Financial result from the working of the British Indian State Railways.**In Thousands of Rupees.*

xxviii

INDIAN RAILWAYS.

Year.	Gross Receipts.	Revenue Expenditure.					Net loss — Net gain +
		Working Expenses.	Surplus profits paid to Companies.	Interest on Capital.	Annuities.	Total.	
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1868-69	.....	4,10	...	...	...	4,10	—4,10
1869-70	81	3,88	...	...	...	3,88	—3,07
1870-71	76	5,22	...	...	...	5,22	—4,46
	1,57	13,20	...	...	...	13,20	—11,63
1871-72	38	6,85	...	...	...	6,85	—6,47
1872-73	1,65	11,30	...	...	...	11,30	—9,65
1873-74	3,99	22,35	...	...	...	22,35	—18,36
1874-75	13,10	37,05	...	...	...	37,05	—23,95
1875-76	29,28	60,35	...	...	...	60,35	—31,07
1876-77	38,07	81,67	...	...	...	81,67	—43,60

1877-78	58,21	1,09,18	...	...	...	1,09,18	-50,97
1878-79	97,68	1,65,39	...	...	...	1,65,39	-67,71
1879-80	2,72,64	2,49,25	...	* 4,13	...	2,53,38	+19,26
1880-81	6,52,20	4,47,09	...	* 1,60,71	...	6,07,80	+44,40
	11,67,20	11,90,48	...	* 1,64,84	...	13,55,32	-1,88,12
1881-82	7,26,71	4,57,51	...	* 1,91,98	...	6,49,49	+77,22
1882-83	7,24,77	5,00,18	...	* 1,92,29	...	6,92,47	+32,30
1883-84	8,44,15	3,79,82	20,96	1,83,41	1,20,31	7,04,50	+1,39,65
1884-85	8,41,92	4,10,10	19,13	2,00,50	1,22,06	7,51,79	+90,13
1885-86	9,95,89	4,73,31	16,90	2,92,11	1,74,08	9,56,40	+39,49
1886-87	10,82,90	4,97,40	24,59	3,67,56	2,30,86	11,20,41	-37,51
1887-88	10,87,19	5,32,92	26,50	4,00,83	2,39,08	11,99,33	-1,12,14
1888-89	11,82,71	5,82,26	23,67	4,54,83	2,47,42	13,08,18	-1,25,47
1889-90	13,38,79	6,61,68	24,77	5,06,21	2,44,52	14,37,18	-98,39
1890-91	13,70,32	6,55,16	22,04	5,07,56	2,24,30	14,09,06	-38,74
	1,01,95,35	51,50,34	1,78,56	32,97,28	16,02,63	1,02,28,81	-33,46
1891-92	16,41,20	7,73,26	48,19	5,65,92	2,42,88	16,30,25	+10,95
1892-93	15,81,48	7,56,29	38,20	6,19,37	2,71,74	16,85,60	-1,04,12
1893-94	16,87,91	7,77,91	48,49	6,48,39	2,79,75	17,54,54	-66,63
1894-95	18,15,21	8,33,19	45,91	6,97,93	3,11,93	18,88,96	-73,75
1895-96	18,55,87	8,59,89	44,19	7,01,07	3,00,11	19,05,26	-49,39
Carried over	85,81,67	40,00,54	2,24,98	32,32,68	14,06,41	88,64,61	-2,82,94

* Include Surplus profits and Annuities.

STATEMENT 7.—(Continued.)

*Financial result from the working of the British Indian State Railways.***In Thousands of Rupees.**

Year.	Gross Receipts.	Revenue Expenditure.					Net loss — Net gain +
		Working Expenses.	Surplus profits paid to Companies	Interest on Capital.	Annuities.	Total.	
1	2	3	4	5	6	7	8
Brought forward...	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	85,81,67	40,00,34	2,24,98	32,32,68	14,06,41	88,64,61	—2,82,94
1896- 97	17,63,96	8,43,66	38,30	7,07,24	2,84,43	18,73,63	—1,09,67
1897- 98	19,04,45	8,71,34	48,78	7,18,23	2,67,67	19,06,02	—1,57
1898- 99	19,61,39	9,45,64	52,89	7,30,98	2,57,45	19,86,96	—25,57
1899-1900	21,97,98	10,09,21	62,96	7,55,95	2,57,79	20,85,91	+1,12,07
1900- 01	25,43,07	12,16,59	53,27	7,96,73	3,53,56	24,20,15	+1,22,92
	1,89,52,52	88,86,98	4,81,18	69,41,81	28,27,31	1,91,37,28	—1,84,76
1901-02	28,91,28	13,76,49	47,36	8,44,87	4,49,67	27,18,39	+1,73,19
1902-03	28,70,64	14,30,04	44,04	8,78,94	4,49,88	28,02,90	+67,74
1903-04	30,86,49	15,07,11	49,61	9,11,92	4,50,69	29,19,33	+1,67,16

1904-05	34,85,06	16,40,84	53,48	9,49,51	4,51,39	30,95,22	+3,39,84
1905-06	35,44,43	16,87,61	62,85	10,00,26	4,52,07	32,02,79	+3,41,64
1906-07	38,73,19	19,31,18	59,45	10,45,14	4,52,75	34,89,15	+3,84,04
1907-08	41,01,51	22,01,05	64,54	10,85,41	4,53,51	38,04,51	+2,97,00
1908-09	40,19,98	24,88,83	48,14	11,49,59	5,14,14	42,00,70	-1,80,72
1909-10	43,38,61	24,32,15	48,37	12,03,22	5,28,44	42,12,18	+1,26,43
1910-11	45,94,46	24,48,55	69,60	12,41,25	5,29,34	42,88,74	+3,05,72
	3,67,55,95	1,91,44,48	5,47,44	1,03,10,11	47,31,88	3,47,33,91	+20,22,04
1911-12	50,36,87	25,89,46	72,30	12,73,51	5,30,25	44,65,52	+5,71,35
1912-13	55,02,96	28,02,31	1,06,45	13,38,99	5,31,32	47,79,07	+7,23,89
1913-14	56,31,92	29,35,91	66,13	13,88,34	5,35,69	49,26,07	+7,05,85
1914-15	54,15,77	29,52,87	1,08,64	14,84,80	5,33,58	50,74,89	+3,40,88
1915-16	57,26,42	29,53,00	90,57	15,23,17	5,34,99	51,01,73	+6,24,69
1916-17	62,94,69	29,96,86	1,15,57	14,83,02	5,52,19	51,47,64	+11,47,05
1917-18	68,92,13	31,35,81	1,49,16	15,62,87	5,53,67	54,01,51	+14,90,62
	4,05,00,76	2,03,66,22	7,03,82	1,00,54,70	37,71,69	3,48,96,43	+56,04,33
1918-19	76,25,70	37,07,67	1,89,64	15,71,68	5,40,07	60,09,06	+16,16,64
1919-20	79,09,94	45,46,75	2,00,92	16,35,90	5,41,99	69,25,56	+9,84,38
	5,60,36,40	2,86,20,64	10,94,38	1,32,62,28	48,53,75	4,78,31,05	+82,05,35
Grand Total	12,31,08,99	6,30,06,12	23,01,56	3,39,76,32	1,40,15,57	11,32,99,57	+98,09,42

APPENDIX

Charges borne by Indian Revenues
In Thousands

Year.	Loss on account of old Guaranteed Railways as per State-ments Nos. 2 and 3.	Charges on account of Subsidized Companies as per State-ment No. 5.	Misc Expenditure on Surveys etc. as per Statement No. 6.	Construction of Pro- tective Railways out of	
				Famine Insurance Fund.	Revenue.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1848-49 to } 1860-61 }	6,42,24	...	...	...	...
1861-62 to } 1067-68 }	11,22,10	...	...	...	...
1868-69 ...	1,90,55	...	...	...	...
1869-70 ...	1,61,86	...	...	...	58
1870-71 ...	1,85,01	...	...	...	79
Total decade	16,59,53	...	...	...	1,37
Total to date	23,01,77	...	...	...	1,37
1871-72 ...	1,61,36	...	...	...	28
1872-73 ...	2,21,92	...	...	...	1,08
1873-74 ...	1,53,47	...	...	...	3,28
1874-75 ...	1,33,77	...	...	...	10,52
1875-76 ...	1,27,35	...	...	...	6,63
1876-77 ...	88,02	...	...	...	2,73
1877-78 ...	—41,50	...	...	...	7,14
1878-79 ...	1,53,48	...	...	...	22,08
1879-80 ...	1,64,29	...	...	...	1,80,58
1880-81 ...	1,40,87	...	...	...	1,52,19
Total decade	13,03,01	...	...	...	3,86,51
Total to date	36,04,77	...	...	...	3,87,88
Carried over.					

8.

on account of Railways.
of Rupees.

Loss by Exchange on Capital Expen- diture in England for State Rys.	Add Loss + or deduct gain - from working of State Railways as per Statement No. 7.	Total charges as per columns 2 to 8.	Interest at 4 per cent. per annum on outstanding total at end of previous year.	Total of columns 9 and 10 to end of each year.
7	8	9	10	11
...	...	6,42,24	57,14	6,99,39
...	...	11,22,10	3,82,70	(a) 22,04,19
1,28	+ 4,10	1,95,94	88,17	24,88,29
26	+ 3,07	1,65,76	99,53	27,53,58
33	+ 4,46	1,90,60	1,10,14	30,54,33
1,87	+ 11,64	16,74,40	6,80,54	...
1,87	+ 11,64	23,16,64	7,37,69	30,54,33
39	+ 6,47	1,68,50	1,22,17	33,45,01
1,65	+ 9,64	2,34,29	1,33,80	37,18,10
6,93	+ 18,36	1,82,04	1,48,52	40,43,66
9,44	+ 23,95	1,77,69	1,61,75	43,83,09
8,17	+ 31,07	1,78,21	1,75,32	47,31,63
10,52	+ 43,61	1,44,87	1,89,27	50,65,77
21,23	+ 50,97	37,84	2,02,63	53,06,23
14,71	+ 67,70	2,57,97	2,12,25	57,76,45
11,41	- 19,26	3,37,01	2,31,06	63,44,52
15,28	- 44,40	2,63,93	2,53,78	68,62,23
99,72	+ 1,88,12	19,77,35	18,30,55	...
1,01,59	+ 1,99,76	42,93,99	25,68,24	68,62,23

APPENDIX

Charges borne by Indian Revenues

In Thousands

Year.	Loss on account of old Guaranteed Railways as per Statements Nos. 2 and 3.	Charges on account of, Subsidized Companies as per Statement No. 5.	Miscellaneous Expenditure on Surveys etc. as per Statement No. 6.	Construction of Protective Railways out of	
				Famine Insurance Fund.	Revenue.
1	2	3	4	5	6
1881-82 ...	82,10	1,56	...	61,46	1,06,54
1882-83 ...	97,43	3,83	...	—12,90	58,30
1883-84 ...	1,08,49	8,55	—20,58	62,65	—39,43
1884-85 ...	1,04,41	8,42	48,51	89,81	19,51
1885-86 ...	1,03,27	4,40	9,93	58,90	63,21
1886-87 ...	79,28	4,36	9,44	20,00	18,31
1887-88 ...	1,01,13	1,89	5,18	...	8,09
1888-89 ...	1,01,30	—1,47	7,06	...	2,24
1889-90 ...	84,23	2,00	14,91	...	50
1890-91 ...	23,25	48	14,93	...	48
Total decade	8,84,99	34,03	89,38	2,79,91	2,36,77
Total to date	44,89,76	34,03	89,38	2,79,91	6,24,65
1891-92 ...	46,52	1	9,21	48,48	...
1892-93 ...	95,10	1,11	1,09	98,45	33,95
1893-94 ...	91,25	—1,31	10,34	1,06,10	7,39
1894-95 ...	1,60,99	—2,50	10,04	...	1,96
1895-96 ...	1,14,90	—70	7,16	52,99	77
1896-97 ...	1,52,16	6,10	6,39	...	1,27
1897-98 ...	1,41,24	9,88	1,62	...	38
1898-99 ...	74,92	6,02	5,43	69,03	15

8.—(Continued.)

on account of Railways.
of Rupees.

Loss by Exchange on capital Expen- diture in England for State Railways.	Add Loss + or deduct gain - from working of State Railways as per Statement No. 7.	Total charges as per columns 2 to 8.	Interest at 4 per cent. per annum on outstanding total at end of previous year.	Total of columns 9 and 10 to end of each year.
7	8	9	10	11
14,14	—77,22	1,88,59	2,74,49	73,25,31
—15,43	—32,30	98,91	2,93,01	77,17,23
... (d)	—1,39,65	—19,98	3,08,69	80,05,94
...	—90,13	1,80,54	3,20,24	85,06,72
...	—39,49	2,00,22	3,40,27	90,47,21
...	+ 37,51	1,68,89	3,61,89	95,77,99
...	+ 1,12,14	2,28,43	3,83,12	1,00,29,54
...	+ 1,25,47	2,34,61	4,07,48	1,08,31,63
...	+ 98,39	2,00,03	4,33,26	1,14,64,93
...	+ 38,74	77,01	4,58,60	1,20,00,53
—1,29	+ 33,46	15,57,25	35,81,05	...
1,00,30	+ 2,33,22	58,51,24	61,49,29	1,20,00,53
...	—10,95	93,27	4,80,02	1,25,73,82
...	+ 1,04,12	3,31,64	5,02,95	1,34,08,42
...	+ 66,63	2,80,40	5,36,34	1,42,25,15
...	+ 73,75	2,44,24	5,69,01	1,50,38,40
...	+ 49,39	2,24,51	6,01,54	1,58,64,43
...	+ 1,09,67	2,75,59	6,34,58	1,67,74,62
...	+ 1,57	1,54,69	6,70,98	1,76,00,29
...	+ 25,57	1,81,13	7,04,01	1,84,85,43

APPENDIX

*Charges borne by Indian Revenues***In Thousands**

Year.	Loss on account of old Guaranteed Railways as per Statements Nos. 2 and 3.	Charges on account of, Subsidized Companies as per Statement No. 5.	Misc. Expenditure on Surveys, etc. as per Statement No. 6.	Construction of Protective Railways out of	
				Famine Insurance Fund.	Revenue.
1	2	3	4	5	6
1899-1900	1,12,30	1,60	6,39	...	35
1900-01 ...	67,50	—83	7,22	...	—12
Total decade	10,56,88	19,40	62,72	3,75,04	46,10
Total to date	55,46,64	53,43	1,52,10	6,54,95	6,70,75
1901-02 ...	33,54	—3,05	11,86	...	—10,01
1902-03 ...	28,09	—1,18	8,84	24	8,20
1903-04 ...	37,47	—1,40	8,15	14,49	3,98
1904-05 ...	20,81	44	7,24	14,57	94
1905-06 ...	44,24	—80	5,33	8,29	1,08
1906-07 ...	40,77	—3,26	6,13	52	13
1907-08 ...	54,55	—5,68	12,27	98	3
1908-09 ...	2,10	—20	3,77	1	6
1909-10 ...	—26	—2,68	5,61	1,80	19
1910-11 ...	—11	—1,66	4,87	5,54	12
Total decade	2,61,20	—19,47	74,07	46,44	4,72
Total to date	58,07,84	33,96	2,26,17	7,01,39	6,75,47
1911-12 ...	...	45	2,73	6,64	12
1912-13 ...	...	—5,93	9,91	6,21	64

B.—(Continued.)

on account of Railways.
of Rupees.

Loss by Exchange on capital Expen- diture in England for State Railways.	Add Loss + or deduct gain— from working of State Railways as per Statement No. 7.	Total charges as per columns 2 to 8.	Interest at 4 per cent. per annum on outstanding total at end of previous year.	Total of columns 9 and 10 to end of each year.
7	8	9	10	11
...	—1,12,07	8,58	7,39,42	1,92,33,43
...	—1,22,92	—49,15	7,69,34	1,99,53,62
...	+1,84,76	17,44,90	62,08,18	.....
1,00,30	+4,17,98	75,96,14	1,23,57,47	1,99,53,62
...	—1,73,19	—1,40,85	7,98,14	2,06,10,91
...	—67,74	—23,55	8,24,44	2,14,11,80
...	—1,67,16	—1,04,45	8,56,47	2,21,63,81
...	—3,39,84	—2,95,85	8,86,55	2,27,54,52
...	—3,41,64	—2,83,51	9,10,18	2,33,81,19
...	—3,84,04	—3,39,74	9,35,25	2,39,76,70
...	—2,97,00	—2,34,85	9,59,07	2,47,00,91
...	+1,80,72	+1,86,46	9,88,04	2,58,75,41
...	—1,26,43	—1,21,78	10,35,02	2,67,88,65
...	—3,05,72	—2,96,96	10,71,54	2,75,63,23
...	—20,22,04	—16,55,08	92,64,70	.....
1,00,30	—16,04,06	59,41,06	2,16,22,17	2,75,63,23
...	—5,71,35	—5,61,41	11,02,53	2,81,04,35
...	—7,23,89	—7,13,05	11,24,17	2,85,15,47

APPENDIX

Charges borne by Indian Revenues

In Thousands

Year.	Loss on account of old Guaranteed Railways as per Statements Nos 2 and 3.	Charges on account of, Subsidized Companies, as per Statement No. 5.	Misc. Expenditure on Surveys, etc., as per Statement No. 6.	Construction of Protective Railways out of	
				Famine Insurance fund.	Revenue.
1	2	3	4	5	6
1913-14 ...	—60	—5,69	—6,88	1,29	21
1914-15 ...	...	4,09	13,08	—20	7
1915-16 ...	...	10,69	2,68	—3	19
1916-17 ...	...	9,56	44	—7	33
1917-18 ...	...	—4,49	7,96	...	—11
Total decade	—60	8,68	29,92	13,84	1,45
Total to date	58,07,24	42,64	2,56,09	7,15,23	6,76,92
1918-19 ...	...	—12,82	44,25	...	81
1919-20 ...	...	—30,93	80,65	...	1,04
Grand Total	58,07,24	—1,11	3,80,99	7,15,23	6,78,77

(a) As per Appendix No. 4.

(b) The figures for the years 1848-49 to 1882-83 have been taken from the Column 2, from column 11 of the India office Statement at page 706 of Column 3, from column 25 of the Indian office Statement at page 707 of Columns 5 and 6, from pages 744—45 of above mentioned Report.

Column 7, from columns 14, 22 and 26 at page 707 of the same Report.

(c) Column 4 for the above period is left blank, as the figures of above noted Summaries.

(d) Loss by Exchange on account of the State Railways for the years after

8.—(Continued.)

on account of Railways.
of Rupees.

Loss by Exchange on capital Expen- diture in England for State Railways.	Add Loss + or deduct gain— from working of State Railways, as per Statement No. 7.	Total charges as per columns 2 to 8.	Interest at 4 per cent. per annum on outstanding total at end of previous year.	Total of columns 2 and 10 to end of each year.
7	8	9	10	11
...	—7,05,85	—7,17,53	11,40,62	2,89,38,56
...	—3,40,88	—3,23,83	11,57,54	2,97,72,27
...	—6,24,69	—6,11,16	11,90,89	3,03,52,00
...	—11,47,05	—11,36,79	12,14,08	3,04,29,29
...	—14,90,62	—14,87,27	12,17,17	3,01,59,29
...	—56,04,33	—55,51,04	81,47,00	.....
1,00,30	—72,08,39	3,90,04	2,97,69,17	3,01,59,21
...	—16,16,64	—15,84,40	12,06,37	2,97,81,18
...	—9,84,38	—9,33,62	11,91,24	3,00,38,80
1,00,30	—98,09,41	—21,27,98	3,21,66,78	.....

following :—

Report of Select Committee of 1884.

Report of Select Committee of 1884.

Miscellaneous Expenditure on Surveys, etc., were not separately shown in the
1882-83 was not traceable.

APPENDIX

Progress in railways of all classes in India from

Year.	Mileage open to end of year.	IN THOUSANDS OF RUPEES.				Gross earnings per mile per week.
		Capital outlay on open lines.	Gross earnings.	Working expenses.	Net earnings.	
1853	20	37,96	90	41	49	87
1860	838	26,66,00	66,67	37,08	29,59	153
1870	4,771	90,00,50	6,66,67	3,63,15	3,03,52	269
1880	8,996	1,28,56,91	12,86,55	6,48,00	6,38,55	282
1881	9,858	1,40,80,80	14,32,31	7,07,12	7,25,19	285
1890	16,404	2,13,67,04	20,67,01	10,30,89	10,36,12	243
1900	24,752	3,29,53,34	31,54,32	15,09,31	16,45,01	245
1910	32,099	4,39,04,73	51,14,22	27,15,12	23,98,50	306
1914-15	35,285	5,19,22,13	60,42,01	32,74,10	27,67,91	329
1915-16	35,833	5,29,98,29	64,66,04	32,91,95	31,74,09	347
1916-17	36,286	5,35,27,97	70,68,42	33,40,32	37,28,10	375
1917-18	36,333	5,41,79,90	77,36,39	35,36,87	41,99,52	409
1918-19	36,616	5,49,74,45	86,28,68	41,80,17	44,48,51	463
1919-20	36,735	5,66,37,77	89,15,32	50,65,65	38,49,67	467

No. 9.

commencement and main results of their working.

Percentage of working expenses to gross earnings.	Percentage of net earnings on capital outlay.	PASSENGERS.			GOODS.		
		Number carried in thousands.	Earnings in thousands of rupees.	Average rate charged per mile in pies.	Quantity carried in thousands of tons.	Earnings in thousands of rupees.	Average rate charged per ton per mile in pies.
45-56	1-29	...	...	...	...	...	...
55-61	1-11	...	...	...	...	...	...
54-47	3-37	...	...	...	...	...	...
50-37	4-97	...	...	...	...	...	...
49-37	5-16	54,764	3,79,23	2-78	13,214	9,55,97	7-95
49-87	4-85	114,082	6,25,81	2-51	22,613	12,99,52	7-11
47-85	4-99	176,308	8,95,07	2-51	42,896	20,36,52	5-88
53-10	5-46	371,580	17,12,04	2-45	65,600	30,43,17	4-83
54-19	5-33	451,086	20,35,29	2-44	80,972	35,09,18	4-43
50-91	5-99	464,381	20,98,57	2-44	82,499	38,75,79	4-34
47-26	6-96	486,030	23,08,19	2-48	86,242	41,43,00	4-01
45-72	7-75	430,268	25,23,15	2-99	85,472	44,49,54	4-08
48-45	8-09	459,732	28,97,78	3-08	91,161	49,13,89	4-28
56-81	6-80	520,027	33,16,29	3-09	87,630	47,11,60	4-43

APPENDIX No. 10.—General results of Working of some of the Indian Railways for the two half-years of financial year 1915-16.

xiii

INDIAN RAILWAYS.

Railway.	Mean-mileage worked.	Capital outlay per mile open in 2nd-half year.	Total earnings per mile per week.		Percentage of total working expenses upon total earnings.		Percentage of net earnings on capital outlay.		Average cost of hauling a passenger one mile.			
			1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.		
5 ft. 6 ins. Gauge.			Mile.	Rs.	Rs.	Rs.					Pies.	Pies.
Bengal-Nagpur	1,894.06	1,82,677	380	461	50.14	38.45	2.47	3.71	1.09	0.86		
B. B. & C. I. Railway	1,343.06	2,09,063	555	670	53.25	40.47	3.09	4.77	1.42	1.06		
Eastern Bengal	560.14	3,74,554	733	745	57.53	56.85	2.01	2.03	1.61	1.47		
East Indian	2,772.50	2,65,373	730	771	38.75	35.94	4.25	4.71	0.78	0.72		
G. I. P. Railway	3,142.23	2,16,631	505	681	65.02	48.99	2.03	4.04	1.99	1.70		
M. & S. M.	1,043.02	1,70,702	472	487	49.97	49.41	3.33	3.45	1.16	1.16		
Nizam's Guaranteed	354.70	1,65,423	346	408	49.77	57.74	2.88	2.82	1.50	1.56		
North Western	5,043.11	1,73,862	365	363	52.39	55.97	2.40	2.12	1.37	1.34		
Oudh and Rohilkhand	1,672.14	1,30,967	267	276	47.08	49.25	2.65	2.64	1.07	1.27		
South Indian	445.94	1,57,225	352	381	48.47	44.11	2.91	3.33	1.06	0.98		
8 ft. 3½ ins. Gauge.												
B. and N. W. Railway	1,055.46	84,476	165	192	39.38	35.17	2.91	3.64	0.78	0.69		
Bhavnagar State	247.95	52,516	127	127	48.23	47.07	3.10	3.22	1.35	1.30		
B. B. & C. I. Railway	2,231.51	81,011	262	321	50.90	43.28	3.92	5.59	0.96	0.86		
Barmah	1,598.46	1,30,768	251	278	59.47	55.29	1.90	2.32	1.67	1.53		
Eastern Bengal	1,117.63	1,12,383	216	248	64.37	55.63	1.45	2.22	1.62	1.25		
Gondal-Portbandar	219.75	46,240	122	137	46.40	48.94	3.56	3.72	1.49	1.57		
Jodhpur-Bikaner	1,302.48	27,800	110	129	48.61	42.00	5.04	6.60	0.82	0.87		
Rohilkhand and Kumaon.	567.13	63,303	120	133	58.10	42.19	2.31	3.06	1.31	1.14		
South Indian	1,135.95	1,04,200	387	366	44.78	50.25	4.76	4.05	0.75	0.86		
2 ft. 6 ins. Gauge.												
Gondia-Chanda and Extensions	631.95	64,535	63	65	91.93	92.03	0.30	0.20	2.23	2.39		
Kalka-Simla	59.92	3,30,327	470	393	49.86	40.67	1.85	1.83	6.55	3.35		

APPENDIX 10 A.—Duty performed by Carriage and Wagon Stock on principal Railways during second half-year of 1920-21.

Railways.	Items.	Coaching vehicle units.			Goods vehicle units.			
		Number on line.	Vehicle units hauled one mile in thousands	Average miles run per vehicle.	Number on line.	Vehicle units hauled one mile in thousands	Average miles run per vehicle.	percentage of freight upon capacity hauled.
1		2	3	4	5	6	7	8
'5-6" Gauge.								
B. N.	1,415	27,010	19,099	16,198	108,682	6,709	53.83
B. B. & C. I.	1,361	38,090	27,987	9,946	66,098	6,645	49.84
E. B.	1,135	21,523	18,963	7,637	37,643	4,929	31.21
G. I. P.	2,905	79,522	27,374	36,320	346,774	9,548	46.45
M. & S. M.	2,967	82,978	27,967	19,508	165,275	8,472	51.08
N. W.	1,021	21,917	21,466	4,862	46,641	9,593	44.55
O. & R.	4,185	85,341	20,392	30,339	126,709	4,506	61.92
S. I.	1,325	26,476	19,982	8,206	29,871	3,640	61.86
		485	7,625	15,722	1,739	8,711	5,009	52.35
Total	16,799	13,90,485	23,899	134,755	946,404	7,023	...
Average run per day per vehicle			131.31	...	...	38.58	...
Ditto. per hour			5.47	...	...	1.60	...
Metre-Gauge.								
A. B.	681	12,523	18,389	4,259	18,345	4,307	43.69
B. & N. W.	1,400	45,876	32,758	8,576	44,488	5,187	45.08
R. M.	2,150	48,142	22,391	10,139	82,610	8,147	48.82
Burma	1,546	29,832	19,296	8,322	58,898	7,076	53.10
E. B.	1,313	21,829	16,625	6,415	26,224	4,087	42.44
M. & S. M.	1,425	25,618	17,977	6,968	43,888	6,298	49.62
S. I.	2,225	29,500	13,255	5,539	36,479	6,585	47.42
J. B.	365	10,827	29,800	2,431	16,405	6,776	41.42
R. & K.	322	5,777	17,941	2,057	7,889	3,835	47.42
Total	11,428	229,124	20,058	54,696	335,216	6,128	...
Average run per vehicle per day			110.20	...	...	33.67	...
Ditto. per hour			4.59	...	...	1.40	...

Note.—Columns 6 and 7 include empty haulage.

APPENDIX

Coaching

1. Average earnings in pies per coaching
2. Average cost of hauling a coaching
3. Average profit on working a coaching

Name of Railway.	Item No. as per heading.	First Class Passenger.				Second Class Passenger.			
		1912.		1915-16.		1912.		1915-16.	
		1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
5-6' Gauge.—									
Bengal Nagpur Ry.	1	18.35	13.81	11.34	14.84	18.84	19.79	15.77	19.43
	2	16.01	16.00	18.02	14.64	16.01	16.00	18.02	14.64
	3	2.34	-2.19	-6.68	0.20	2.83	3.79	-2.25	4.79
B. B. & C. I. Ry. ...	1	17.52	18.24	13.47	18.67	21.24	18.82	19.29	22.92
	2	22.15	27.24	26.70	20.46	22.15	27.24	26.70	20.46
	3	-4.63	-9.00	-13.23	-1.79	-0.91	-8.42	-7.41	2.46
Eastern-Bengal Ry.	1	18.73	15.01	11.93	12.83	23.53	22.15	19.49	21.92
	2	24.93	27.48	20.13	24.68	24.93	27.48	20.13	24.68
	3	-6.20	-12.47	-8.20	-11.85	-1.40	-5.33	-0.64	-2.76
East-Indian Ry. ...	1	17.27	14.96	12.58	14.84	12.89	13.62	11.59	14.27
	2	12.66	12.57	13.07	11.37	12.66	12.57	13.07	11.37
	3	4.61	2.39	-0.49	3.47	0.23	1.05	-1.48	2.90
G. I. P. Ry. ...	1	14.38	13.84	10.55	13.27	18.76	19.13	25.32	27.48
	2	23.86	25.29	27.17	22.89	23.86	25.29	27.17	22.89
	3	-9.48	-11.45	-16.62	-9.62	-5.10	-6.16	-1.85	4.59
M. & S. M. Ry. ...	1	23.86	22.47	17.69	19.32	26.54	25.17	22.33	22.85
	2	26.73	26.81	26.87	26.27	26.73	26.81	26.87	26.27
	3	-2.87	-4.34	-9.18	-6.95	-0.19	-1.64	-4.54	-3.42
Nizam's Guaranteed State Ry.	1	16.34	14.02	12.09	13.78	20.00	20.13	20.76	23.49
	2	21.50	25.00	29.33	36.61	21.56	25.00	29.33	36.61
	3	-5.22	-10.98	-17.24	-22.83	-1.56	-4.87	-8.57	-13.12

(a) The administration Report has 95.34 but that is evidently wrong.

No. 11.

Traffic.

vehicle per mile items, 56-60 of Analysis.

vehicle with its load one mile, item 78 Analysis.

vehicle one mile, items 82-86 Analysis.

Third or Inter Class.				Fourth or Lowest Class.				Other Vehicles..				Remarks.
1912.		1915-16.		1912.		1915-16.		1912.		1915-16.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
14-36	20-26	20-36	24-84	54-14	57-55	56-83	57-44	78-05	63-50	55-51	66-43	
16-01	16-00	18-02	14-64	16-01	16-00	18-02	14-64	16-01	16-00	18-02	14-64	
-1-65	4-26	2-34	10-20	38-13	41-55	38-81	42-80	62-04	47-50	37-49	51-79	
...	...	...	...	52-83	48-76	53-77	55-02	57-22	60-57	44-89	53-34	
Not	provided			22-15	27-24	26-70	20-46	22-15	27-24	26-70	20-46	
...	...	...	...	30-68	21-52	27-07	34-56	35-07	33-33	18-19	32-88	
29-56	32-40	25-24	30-15	61-64	49-17	40-26	56-67	45-39	49-65	29-30	33-54	
24-93	27-48	20-13	24-68	24-93	27-48	20-13	24-68	24-93	27-48	20-13	24-68	
4-63	4-92	5-11	5-47	36-71	21-69	20-13	31-99	20-46	22-17	9-17	8-86	
27-67	25-77	21-37	24-26	56-53	55-10	53-63	50-23	46-06	38-24	38-64	39-44	
12-66	12-57	13-07	11-37	12-66	12-57	13-07	11-37	12-66	12-57	13-07	11-37	
15-01	13-20	8-30	12-89	43-87 (a)	42-53	40-56	38-86	33-40	25-67	25-57	28-07	
30-36	41-01	35-67	34-64	71-48	45-34	42-67	40-16	63-32	63-96	76-96	88-58	
23-86	25-29	27-17	22-89	23-86	25-29	27-17	22-89	23-86	25-29	27-17	22-89	
6-50	15-72	8-50	11-75	47-62	20-05	15-50	17-27	39-46	38-67	49-79	65-69	
23-74	23-81	56-34	64-25	64-76	58-13	69-49	66-33	70-78	72-64	52-51	64-22	
26-78	26-81	26-87	26-27	26-73	26-81	26-87	26-27	26-73	26-81	26-87	26-27	
-2-99	-3-00	29-47	37-98	38-03	31-32	42-62	40-08	44-05	45-83	25-64	37-95	
...	...	...	...	56-67	58-05	69-67	68-78	96-91	83-72	86-06	91-22	
Not	Provided			21-56	25-00	29-33	36-61	21-56	25-00	29-33	36-61	
...	...	...	...	35-11	33-05	40-34	32-17	75-35	58-72	66-73	54-61	

APPENDIX

Coaching

1. Average earnings in pies per coaching
2. Average cost of hauling or coaching
3. Average profit on working a coaching

Items. Name of Railway.	Item No., as per head, ing.	First Class Passenger.				Second Class Passenger.			
		1912.		1915-16.		1912.		1915-16.	
		1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half
5'-6" gauge									
N.W. Ry. ...	1	10.15	8.95	7.97	10.19	14.85	13.22	17.77	17.66
	2	19.54	21.07	22.64	23.16	19.54	21.07	22.64	23.16
	3	9.39	12.12	14.67	12.97	4.69	7.85	4.87	5.50
Oudh and Rohilkhand Ry.	1	14.83	16.10	12.24	12.62	19.77	27.37	20.58	20.68
	2	17.18	21.36	18.97	20.11	17.18	21.36	18.97	20.11
	3	2.35	5.26	6.73	7.49	2.59	6.01	1.61	0.57
South-Indian Ry.	1	26.14	19.05	22.53	20.57	34.75	27.35	30.97	28.22
	2	25.98	27.42	23.50	21.62	25.98	27.42	23.50	21.62
	3	0.16	8.37	0.97	1.05	8.77	0.07	7.47	6.60
3'-3½" Gauge.									
B. & N.W. Ry.	1	1.73	1.77	1.75	2.18	3.49	3.54	4.60	4.92
	2	7.25	6.41	8.52	8.12	7.25	6.41	8.52	8.12
	3	5.52	4.64	6.77	5.94	3.76	2.87	3.92	3.20
Rajp.-Malwa Ry.	1	9.90	6.96	4.96	6.76	13.45	12.47	13.40	14.63
	2	13.04	15.57	15.67	13.28	13.04	15.57	15.67	13.28
	3	3.14	8.61	10.71	6.52	0.41	3.10	2.27	1.35
J.-B. Ry. ...	1	5.79	6.77	4.66	8.41	12.51	14.06	14.28	14.66
	2	12.55	12.29	12.86	11.87	12.55	12.29	12.86	11.87
	3	6.76	5.52	8.20	3.46	0.04	1.77	1.42	2.79
Rohilkhand and Kumaon Ry.	1	15.19	14.02	14.74	9.19	29.69	28.87	20.66	16.34
	2	12.91	13.65	16.81	14.16	12.91	13.65	16.81	14.16
	3	2.28	0.37	2.07	4.97	16.78	15.23	3.85	2.18

No 11.—(Continued).

Traffic.

vehicle per miles.

vehicle with it load one mile.

vehicle one mile.

Third or Inter Class.				Fourth or Lowest Class.				Other Vehicles.				Remarks.
1912.		1915-16.		1912.		1915-16.		1912.		1915-16.		
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	
22-25	21-88	20-07	21-69	50-04	49-41	57-80	55-77	52-18	59-73	73-06	114-98	
19-54	21-07	22-64	23-16	19-54	21-07	22-64	23-16	19-54	21-07	22-64	23-16	
2-71	0-81	2-57	1-47	30-50	28-34	35-16	32-61	32-64	38-66	50-42	91-82	
27-74	28-62	38-18	31-91	62-41	70-20	57-68	52-67	47-13	48-75	37-26	37-08	
17-18	21-36	18-97	20-11	17-18	21-36	18-97	20-11	17-18	21-36	18-97	20-11	
10-56	7-26	19-21	11-80	45-23	48-84	38-71	32-56	29-95	27-39	18-29	16-97	
...	...	...	...	57-91	54-36	52-40	52-38	85-59	121-23	41-46	45-20	
} Not Provided				25-98	27-42	23-50	21-62	25-98	27-42	23-50	21-62	
...	...	...	...	31-93	26-94	28-90	30-76	59-61	93-81	17-96	23-58	
6-36	6-06	6-97	8-42	27-42	25-07	27-77	29-26	98-45	118-55	108-47	98-52	
7-25	6-41	8-52	8-12	7-25	6-41	8-52	8-12	7-25	6-41	8-52	8-12	
-0-89	-0-85	1-55	0-30	20-17	18-66	19-25	21-14	91-20	112-14	99-95	90-40	
63-63	...	...	...	34-66	33-40	35-87	33-92	44-83	42-00	46-84	48-28	
13-04	Discontinued			13-04	15-57	15-67	13-28	13-04	15-57	15-67	13-28	
50-59	...	...	...	21-62	17-83	20-20	20-64	31-79	26-43	31-17	35-01	
18-50	20-76	17-98	15-39	27-26	31-64	38-46	35-46	53-05	60-86	48-41	44-73	
12-55	12-29	12-86	11-87	12-55	12-29	12-86	11-87	12-55	12-29	12-86	11-87	
5-95	8-47	5-12	3-52	24-71	19-35	25-60	23-59	40-50	48-07	35-55	32-86	
10-64	10-84	18-76	14-47	39-03	37-63	32-63	31-58	89-58	83-99	96-81	72-75	
12-91	13-65	16-81	14-16	12-91	13-65	16-81	14-16	12-91	13-65	16-81	14-16	
-2-27	-2-81	1-96	0-31	26-13	23-98	15-82	17-42	76-67	70-34	80-00	58-59	

APPENDIX

Goods

1. Average sum in pies received
2. Average cost in pies of hauling
3. Average profit in pies on working

Name of Railway.	Item 1 as per heading.			
	1912.		1915-16.	
	1st half.	2nd half.	1st half.	2nd half.
5'-6" Gauge.				
Bengal-Nagpur	Pies. 3-93	Pies. 3-53	Pies. 3-17	Pies. 3-37
B. B. & C. I.	6-10	5-39	5-71	5-81
Eastern Bengal	6-02	7-08	6-49	6-14
East Indian	3-14	3-02	2-88	2-81
G. I. P.	5-51	4-54	4-27	4-68
M. & S. M.	5-92	5-58	4-88	4-75
Nizam's Guaranteed	5-86	5-96	5-77	5-99
North-Western	4-92	4-54	4-31	4-08
Oudh and Rohilkhand	4-74	4-75	4-71	5-12
South Indian	6-41	6-43	6-23	6-11
3'-3½" Gauge.				
B. & N. W.	5-38	5-40	5-29	5-84
Rajputana-Malwa	5-73	5-50	5-68	6-41
Jodhpur-Bikaner	6-51	6-35	5-13	6-03
Rohilkhand and Kumaon	5-49	6-05	6-17	7-25
South Indian	7-14	6-91	6-35	6-18
Bhavnagar State	9-33	8-48	7-83	7-33
Gondal-Porbandar State	10-07	8-61	8-37	7-49
Jamnagar State	13-52	12-92	12-54	14-44
Junagadh State	10-73	6-29	8-90	9-12
2'-6" Gauge.				
Kalka-Simla	30-66	29-89	9-64	11-57
Gondia-Chanda & its Extensions	6-56	4-66	5-46	5-61.

(a) Doubtful but the figures are

No. 12.

Traffic.

*for carrying a ton one mile, item 93 of Analysis.**one ton one mile, item 115 of Analysis.**one ton one mile, item 118 of Analysis.*

Item 2.				Item 3.			
1912.		1915-16.		1912.		1915-16.	
1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.	1st half.	2nd half.
Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.
1.79	1.81	1.76	1.41	2.14	1.72	1.41	1.96
2.50	2.92	2.81	2.23	3.52 _a	2.47	2.90	3.58
3.73	3.91	3.36	3.31	2.29	3.17	3.13	2.83
1.22	1.25	1.28	1.13	1.92	1.77	1.60	1.68
2.44	2.69	2.79	2.22	3.07	1.85	1.48	2.46
3.04	3.07	2.58	2.47	2.88	2.51	2.30	2.28
2.25	2.71	2.77	3.33	3.61	3.25	3.00	2.66
3.37	2.42	2.45	2.60	1.55	2.12	1.86	1.48
1.90	2.54	2.52	3.67	2.84	2.21	2.19	2.45
2.92	2.96	2.45	2.21	3.49	3.47	3.78	3.90
1.91	1.87	2.27	2.23	3.47	3.53	3.02	3.61
2.71	3.10	3.10	2.82	3.02	2.40	2.58	3.59
3.08	3.28	2.94	2.66	3.43	3.07	2.19	3.37
2.51	3.07	3.77	3.34	2.98	2.98	2.40	3.91
3.61	4.36	3.32	3.50	3.53	2.55	3.03	2.68
4.54	5.19	4.22	3.75	4.79	3.29	3.61	3.58
4.99	5.33	4.13	4.05	5.38 _a	3.28	4.24	3.44
8.40	8.68	7.63	8.04	5.12	4.24	4.91	6.40
5.33	5.21	5.40	4.85	5.40	1.08	3.50	4.27
36.59	23.69	8.86	12.56	-5.93	6.20	0.78	-0.99
4.82	4.39	5.37	5.16	1.75	0.27	0.09	0.45

from the Railway Board's Report.

APPENDIX No. 13.

State Railways worked by the State—Establishment employed on 30th June 1912.

Service.	Items.	Minimum and maximum monthly pay.	Europeans and Anglo-Indians.		Indians.	
			No.	Monthly pay.	No.	Monthly pay.
Superior Officers.						
Permanent Engineers	...	1750--2750	9	29,250	...	...
Permanent Engineers	...	250—1,500	153	1,08,746	15	10,300
Temporary Engineers	...	200—1,100	54	26,850	11	4,400
Management	...	1750—3000	6	13,375	...	...
Traffic Department	...	1100—2000	21	28,200	...	...
Traffic Department	...	200—1,000	66	35,275	12	5,525
Locomotive	...	400—2,000	52	40,300	...	...
Carriage and Wagon	...	300—1,750	14	9,800	...	...
Stores Departments	...	200—1,100	18	10,250	1	950
Miscellaneous officers	...	350—1,900	30	20,662	...	...
Examiners of Accounts	...	700—1,800	21	26,250	} 3 a3	3,750
Deputy Examiners of „	...	400—600	8	4,000		1,500
Travelling Auditors	...	200—300	3	750		...
Total Superior Officers...	455	3,53,708	45	26,425
Upper Subordinates.						
Sub-Engineers	...	250—400	8	2,700	12	3,400
Supervisors	...	150—200	14	2,400	17	3,000
Overseers	...	60—100	1	100	14	1,100
Management Department	...	250—700	5	1,720	3	1,400
Permanent Way Inspectors	...	250—500	43	15,642	4	1,325
Signal Inspectors	...	300—500	13	4,445	...	...
Traffic Inspectors	...	250—550	69	22,810	5	1,750
Locomotive Foremen	...	230—600	150	50,965	...	...
Carriage and Wagon	...	230—500	41	13,105	...	...
Stores and Miscellaneous	...	250—600	9	3,050	2	650
Medical	11	(a) 2,200	...	...
Accountants and Travel- ling Inspectors	...	80—450	61	(a) 16,165	107	28,355
Total upper Subordinates	425	1,35,302	164	40,980

(a) Pay was not given in the Classified List. Figures given here are approximate.

APPENDIX No. 14.

Superior Establishment on Railways worked by Companies and Indian States on 30th June 1912.

Items. Service.	Minimum and maximum pay.	Officers.			
		European and Anglo-Indian.		Indian.	
		No.	Monthly pay.	No.	Monthly pay.
<i>Railways.—</i>	Rs.		Rs.		Rs.
Assam-Bengal Ry. ...	250—2,500	43	31,687		...
B. & N. W. Ry. ...	300—2,750	70	47,575		...
Bengal-Nagpur Ry. ...	250—3,000	129	99,759	7	3,362
B. B. & C. I. Ry. ...	250—3,500	135	1,08,175	3	1,275
Burma Ry. ...	325—3,000	96	71,580	1	325
East Indian Ry. ...	250—3,500	184	1,54,695	4	1,595
G. I. P. Ry. ...	150—3,500	183	1,47,107	3	1,350
H. H. Nizam's Gd. Ry.	400—2,850	34	29,505	2	1,235
M. & S. M. Ry. ...	250—3,500	108	86,845	6	2,300
R. & K. Ry. ...	150—1,800	20	11,800	...	...
South Indian Ry. ...	250—3,000	86	70,075	2	850
Total Companies ...		1,088	8,58,803	28	12,292
<i>Departments.—</i>	Rs.		Rs.		Rs.
Agency ...	350—3,500	41	63,362	3	1,800
Engineering ...	150—2,500	439	3,15,952	6	2,667
Traffic ...	150—2,500	233	1,69,049	5	1,995
Loco. & Carriage ...	300—2,500	178	1,53,481	...	...
Stores ...	250—1,750	42	27,677	1	325
Medical ...	250—1,750	43	37,340	3	900
Audit and Accounts...	250—2,500	84	71,902	10	4,605
Collieries, Jetty, Marine, Printing & Electrical.	350—1,800	28	20,040	...	...
Total principal Coys.		1,088	8,58,803	28	12,292
Minor Companies ...	250—2,500	19	13,207	3	1,250
Barsi Light Ry. Coy.	...	4	...	...	...
J. B. Ry. ...	300—1,500	16	10,895	1	450
Other Indian States...	75—1,050	16	10,090	10	2,730
Grand Total ...		1,143	8,92,995	42	16,722

APPENDIX No. 16.

Railway Administrations in India and original names of Railways comprised in each administration on 31st March 1918.

Serial No.	Name of administration and of Railways comprised in each system.	Classified head.	Route-miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	2'—0" Gauge.	Total.
1	I.—GOVERNMENT ADMINISTRATIONS.	I					
	<i>Eastern-Bengal State Railway:—</i>						
	Eastern Bengal	(a) I	413·57	.....	.....	.....	.....
	Calcutta and South-Eastern	(a) I	28·00	.....	.....	.....	.....
	Bengal Central	(f) I	127·69	.....	.....	.....	.....
	Sara-Sirajganj	(e) IV	53·12	.....	.....	.....	.....
	Northern Bengal	(b) I	.....	977·72	.....	.....	.....
	Cooch Behar	(c) XII	.....	33·09	.....	.....	.....
	Mymensingh-Jamalpur-Jagannathganj.	(e) IV	.....	56·05	.....	.....	.....
	Ranaghat-Krishnagarh	(f) I	.....	.....	20·25	.....	.....
2	Teesta-Kurigam	(b) I	.....	.....	14·85	.....	.....
			622·38	1,066·86	35·10	.....	1,724·34
	Jorhat (Assam Provincial Administration).	(b) I	.....	.....	.....	32·50	32·50
	<i>North-Western State Railway:—</i>	I					
	S. P. and D.	(a) I	737·00	.....	.....	.....	.....
	Panjab Northern	(b) I	420·00	.....	.....	.....	.....
	Indus Valley	(b) I	653·00	.....	.....	.....	.....

Sindh-Sagar	...	...	(b) I	342-91	.....	.....	.....	.....
Sindh-Pishin	...	...	(b) I	336-75	.....	.....	.....	.....
Amritsar-Pathankot	...	...	(b) I	66-70	.....	.....	.....	.....
Other extensions and branches	...	...	(b) I	1,133-91	.....	.....	.....	.....
Jammu-Kashmir	...	...	(c) XII	16-01	.....	.....	.....	.....
Rajpur-Bhatinda	...	...	(c) XII	108-04	.....	.....	.....	.....
Amritsar-Patti	...	...	(e) IV	54-26	.....	.....	.....	.....
Mandra-Bhaun	...	...	(e) IV	46-38	.....	.....	.....	.....
Jullandhar Mukerian	...	...	(e) IV	44-81	.....	.....	.....	.....
Khanpur-Chachran	...	...	(c) XII	22-02	.....	.....	.....	.....
Ludhiana-Dhuri-Jakhal	...	...	(c) XII	78-65	.....	.....	.....	.....
Phagwara-Rahon	...	...	(e) IV	45-21	.....	.....	.....	.....
Sialkot-Narowal	...	...	(e) IV	38-16	.....	.....	.....	.....
Southern Panjab—Main line	...	...	(e) IV	425-92	.....	.....	.....	.....
Jullundar-Doab Extension	...	...	...	130-19	.....	.....	.....	.....
Ludhiana Extension	...	...	...	152-04	.....	.....	.....	.....
Jacobabad-Kashmor	...	...	(e) IV	.....	.....	76-70	.....	.....
Kohat-Thal	...	...	(b) I	.....	.....	61-75	.....	.....
Nowshera-Dargai	...	...	(b) I	.....	.....	40-40	.....	.....
Trans-Indus (Kalabagh-Bannu)	...	...	(b) I	.....	.....	135-38	.....	.....
Kalka-Simla	...	...	(f) I	.....	.....	59-92	.....	.....
				4,851-96	.....	374-15	.....	5,226-11
<i>Oudh and Rohilkhand State Railway:—</i>			I					
Oudh and Rohilkhand	...	...	(a) and (b) I	1,509-77	.....	.....	.....	.....

APPENDIX No. 16.—(Continued).

Railway administrations in India and Railways comprised in each administration on 31st March 1918.

Serial No.	Name of administration and of Railways comprised in each system.	Classified head.	Route-miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	2'—0" Gauge.	Total.
	Hardwar-Dehra	(e) III	32·04	.....	.....	.....	.....
			1,541·81	.....	.....	.....	1,541·81
	Total head I ...		7,016·15	1,066·86	409·25	32·50	8,524·76
	II.—INDIAN STATES' ADMINISTRATIONS.	XI					
5	Bhavnagar Durbar—Bhavnagar State Railway	(c)	.....	206·31	} .....	.....	249·02
	Dhrangadhara State Railway	(c)	.....	42·71		.....	36·78
6	Cutch Durbar—Cutch State Railway ...	(c)	.....	36·78	.....	.....	36·78
7	Dhoulpur Durbar—Dhoulpur-Bari State Railway	(c)	.....	.....	36·38	}	51·63
	Mohari-Barauli	(c)	.....	.....	15·25		
8	Gondal-Porebunder Durbars—Gondal-Porebunder State Railway	(c)	.....	148·01	} .....	.....	231·44
	Jetalsar-Rajkot State Railway	(c)	.....	46·21		.....
	Khijadia-Dhari	(c)	.....	37·22		.....
9	Gwalior Durbar—Gwalior Light Railway	(c)	.....	.....	.....	249·96	249·96

10	<i>Jodhpur Bikaner Durbars—Jodhpur</i>							
	State Railway	(c)	.....	608.75	.....	.....	} 1,355.57	
	Bikaner State Railway	(c)	.....	497.66	.....	.....
	Pipar-Bilara	(c)	.....	.....	.....	25.25		
	Jodhpur-Hyderabad	(b) II	.....	123.98	.....	.....
	Mirpurkhas-Jhudo	(e) VI	.....	50.43	.....	.....
	Mirpurkhas-Khudro	(e) VI	.....	49.50	.....	.....
11	<i>Junagarh Durbar—Junagarh State Ry...</i>	(c)	.....	120.90	.....	.....		120.90
12	<i>Morvi Durbar—Morvi State Railway ...</i>	(c)	.....	73.94	18.89	.....		92.83
13	<i>Mysore Durbar—Kolar District Railway.</i>	(c)	.....	.....	63.51	.....	} 231.80	
	Tarikere-Narsimha Rajpura	(c)	.....	.....	.....	26.60		
	Bangalore-Chik Ballapur Light Railway.	(e) XIII	.....	.....	38.74	.....	
	Mysore-Arsikere	(c)	.....	102.95	.....	.....
14	<i>Navanagar Durbar—Jamnagar State Ry.</i>	(c)	.....	54.22	.....	.....		54.22
15	<i>Udaipur Durbar—Udaipur-Chitorgarh...</i>	(c)	.....	67.30	.....	.....		67.30
	Total head II ... ..	...	.....	2,266.87	172.77	301.81		2,741.45
	III.—COMPANIES ADMINISTERING RAILWAYS ON BEHALF OF GOVERNMENT.	II						
	A. OLD GUARANTEED COMPANIES WITH REVISED CONTRACTS.	II						
16	<i>East Indian Railway Company—</i>	II						
	East Indian Railway	(a) II	2,340.53	.....	.....	.....		.....
	Nalhati Railway	(f) II	27.23	.....	.....	.....		.....
	Patna-Gaya State Railway	(b) II	57.68	.....	.....	.....		.....
	Dildarnagar-Ghazipur	(b) II	12.00	.....	.....	.....		.....

Railway administrations in India and Railways comprised in each administration on 31st March 1918.

Serial No.	Name of administration and of Railways comprised in each system.	Classified head.	Route-miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	0'—0" Gauge.	Total.
17	Tarkessur	(f) II	22.21	.....	.....	.....	.....
	Delhi-Umbala-Kalka	(e) VI	206.40	.....	.....	.....	.....
	South-Bihar	(e) IV	79.19	.....	.....	.....	.....
	Jind-Panipat	(c) XII	25.90	.....	.....	.....	.....
	Devghur Branch	(f) II	4.12	.....	.....	.....	.....
	Total		2,775.26	.....	.....	.....	2,775.26
	<i>South Indian Railway Company—</i>	II	} 445.94	881.49	.....	.....	.....
	Great Southern of India	(a) II					
	Carnatic Railway	(a) II					
	Indian Tramway Company	(f) II					
	Nilgiri Railway	(f) II					
	Peralam-Karaikkal	(e) XIV	.....	28.96	.....	.....	.....
	Podanur-Pollachi	(g) IX	.....	14.65	.....	.....	.....
	Pondicherry	(e) XIV	.....	25.04	.....	.....	.....
	Shoranur-Cochin	(e) XIV	.....	7.85	.....	.....	.....
	Tanjore District Board Railway	(c) XII	.....	64.75	.....	.....	.....
	Tinnevely-Quilon (Travancore)—British Section	(g) IX	.....	111.94	.....	.....	.....
		(b) II	.....	50.41	.....	.....	.....

	Travancore State	...	...	(c) XII	.....	95-96	.....	.....	.....
	Morapur-Hosur	...	...	(d) II	.....	.....	73-40	.....	.....
	Tirupattur-Krishnagiri	...	...	(d) II	.....	.....	25-38	.....	.....
	Surmangalam-Salem	...	...	(g) IX	3-86	.....	.....	.....	.....
	Total	...	...		449-80	1,281-05	98-78	.....	1,829-63
18	<i>G. I. P. Railway Company—</i>			II					
	G. I. P. Railway	...	...	(a) II	1,536-32	.....	.....	.....	.....
	Dhond-Manmad	...	...	(b) II	145-44	.....	.....	.....	.....
	Khamgam-Amraoti	...	...	(b) II	13-46	.....	.....	.....	.....
	Wardha Coal State Railway	...	...	(b) II	45-39	.....	.....	.....	.....
	Sindhia State Railway	...	...	(b) II	76-49	.....	.....	.....	.....
	Bhopal-Itarsi—British Section	...	...	(b) II	12-66	.....	.....	.....	.....
	Bhopal State Section	...	...	(c) XII	44-56	.....	.....	.....	.....
	Indian Midland	...	...	(d) II	736-03	.....	.....	.....	.....
	Agra-Delhi Chord	...	...	(b) II	125-88	.....	.....	.....	.....
	Baran-Kotah	...	...	(b) II	40-29	.....	.....	.....	.....
	Bhopal-Ujjain	...	...	(c) XII	113-28	.....	.....	.....	.....
	Bina-Guna-Baran	...	...	(c) XII	147-07	.....	.....	.....	.....
	Cawnpore-Banda	...	...	(b) II	75-71	.....	.....	.....	.....
	Dhond-Baramati	...	...	(e) IV	.....	.....	27-26	.....	.....
	Ellichpur-Yeotmal	...	...	(e) IV	.....	.....	117-66	.....	.....
	Matheran Light Railway	...	...	(e) VI	.....	.....	.....	12-61	.....
	Pulgaon-Arvi	(e) IV	21-83
	Total		3,112-58	166-75	12-61	3,291-94

APPENDIX No. 16.—(Continued).

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Railway Administrations in India and Railways comprised in each administration on 31st March 1918.

INDIAN RAILWAYS.

Serial No.	Name of administration and of Railways comprised in each system.	Classified head.	Route—miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	2'—0" Gauge.	Total.
19	B. B. & C. I. Railway Company:—	II					
	B. B. & C. I. Railway	(a) II	391.30	39.05	.....	.....	.....
	Patri State Railway	(b) II	22.12	.....	.....	.....	.....
	Godhra-Rutlam-Nagda	(b) II	141.14	.....	.....	.....	.....
	Nagda-Muttra	(b) II	339.10	.....	.....	.....	.....
	Bayana-Agra	(b) II	50.61	.....	.....	.....	.....
	Baroda-Godhra Chord	(b) II	43.67	.....	.....	.....	.....
	Nagda-Ujjain	(c) XII	32.51	.....	.....	.....	.....
	Petlad-Cambay:—	(c) XII					
	Baroda-State ... ..	...	21.42	.....	.....	.....	.....
	Cambay State ... ..	...	12.36	.....	.....	.....	.....
	Tapti-Valley Railway	(e) IV	155.72	.....	.....	.....	.....
	Rajputana-Malwa State Railway ...	(b) II	9.18	939.90	.....	.....	.....
	Holkar-State Railway	(b) II	.....	86.89	.....	.....	.....
	Sindhia-Neemuch	(b) II	.....	156.48	.....	.....	.....
	Western Rajputana	(b) II	.....	82.36	.....	.....	.....
	Rewari-Fazilka	(b) II	.....	262.45	.....	.....	.....
	Cawnpore-Achnera including Muttra-Hathras Light Railway, and Cawnpore-Farukabad State Railway ...	(b) II	.....	254.48	.....	.....	.....

Palanpur-Deesa	...	...	(b) II	.....	17-28	.....	.....	.....
Ahmedabad-Dholka	...	...	(e) IV	.....	33-54	.....	.....	.....
Ahmedabad-Prantelj	...	...	(e) IV	.....	88-70	.....	.....	.....
Gaekwar's Mehsana	...	...	(c) XII	.....	162-63	.....	.....	.....
Jaipur State Railway	...	...	(c) XII	.....	108-04	.....	.....	.....
Vijapur-Kalol-Kadi	...	...	(c) XII	.....	46-11	.....	.....	.....
Billimora-Kalamba	...	...	(c) XII	.....	.....	34-93	.....	.....
Broach-Jambusar	...	...	(b) II	.....	.....	29-69	.....	.....
Gaekwar's Dabhoi	...	...	(c) XII	.....	.....	153-94	.....	.....
Kosamba-Zankhvav	...	...	(c) XII	.....	.....	26-10	.....	.....
Bodoli-Chhota Udaipur	...	...	(c) XII	.....	.....	22-56	.....	.....
Petlad-Vaso	...	...	(c) XII	.....	.....	19-25	.....	.....
Rajpipla State Ry.	....	..	(c) XII	.....	.....	39-24	.....	.....
				1,219-13	2,277-91	325-71	.....	3,822-75
Total head III A				7,556-77	3,558-96	591-24	12-61	11,719-58
III. B.—NEW COMPANIES FORMED AFTER 1882.								
20	Madras and S. M. Railway Company—			II				
	Madras Railway	...	(a) II	1,031-73	.....	.....	.....	.....
	Kolar Gold Fields	...	(c) XII	9-88	.....	.....	.....	.....
	Tenali-Repali	...	(g) IX	21-50	.....	.....	.....	.....
	Southern Marhatta	...	(d) II	.....	1,518-13	.....	.....	.....
	Bezwada-Masulipatam	...	(g) IX	.....	51-80	.....	.....	.....
	Birur-Shimoga	...	(c) XII	.....	37-92	.....	.....	.....

APPENDIX No. 16.—(Continued).

Railway Administrations in India and Railways comprised in each administration on 31st March 1918.

Serial No.	Name of administration and of Railways comprised in each system,	Classified head.	Route-miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	2'—0" Gauge.	Total.
	Dhone-Kurnool	(b) II	.....	32·00	.....	.....	.....
	Hindupur	(c) XII	.....	51·35	.....	.....	.....
	Kolhapur State Railway	(c) XII	.....	29·27	.....	.....	.....
	Mysore-Nanjangarh	(c) XII	.....	15·80	.....	.....	.....
	Mysore State Railway	(c) II	.....	296·28	.....	.....	.....
	Sangli State Railway	(c) XII	.....	4·90	.....	.....	.....
	W. I. Portuguese Railway	(e) XIV	.....	51·10	.....	.....	.....
	Total ... ..	...	1,063·11	2,088·55	.....	.....	3,151·66
21	<i>Bengal Nagpur Railway Company—</i>	II					
	Nagpur-Chhattisgarh	(b) II	145·26	.....	.....	.....	.....
	Katni-Umaria	(b) II	35·88	.....	.....	.....	.....
	East-Coast, Northern Section	(b) II	321·55	.....	.....	.....	.....
	Bengal-Nagpur	(d) II	1,385·95	.....	.....	.....	.....
	Gondia-Chanda Extension	(d) II	.....	.....	217·25	.....	.....
	Jubbulpur-Gondia Extension	(d) II	.....	.....	311·81	.....	.....
	Mourbhanj State Railway	(c) XII	.....	.....	32·41	.....	.....
	Nagpur-Chhindwara	(d) II	.....	.....	97·20	.....	.....

	Parlaki Medi Light Railway	(c) XII	.....	.....	24.62	.....	.....
	Purulia Ranchi Branch	(d) II	.....	.....	115.30	.....	.....
	Raipur-Dhamtari Branch	(d) II	.....	.....	56.94	.....	.....
	Tumsar-Tirodi Light Railway	(b) II	.....	.....	.....	51.10	.....
	Total ... ..	...	1,888.64	.....	855.53	51.10	2,795.27
22	<i>Assam-Bengal Railway Company—</i>	II					
	Assam-Bengal Railway including						
	Noakhali Branch	(d) II	.....	869.41	.....	.....	.....
	Mymensingh Bhairab Bazar	(e) V	.....	87.93	.....	.....	.....
	Total ... ..	...	.....	957.34	.....	.....	957.34
23	<i>Burmah Railways Company—</i>	II					
	Burmah Railways including Rangoon						
	and Irrawadi Valley State Railway.	(b, d) II	.....	1,341.85	.....	.....	.....
	Extensions	(d) II	.....	186.93	.....	.....	.....
	Southern Shan States Railway	(d) II	.....	69.68	.....	.....	.....
	Total ... ..	...	.....	1,598.46	.....	.....	1,598.46
	Total head III B ... ..	...	2,951.75	4,644.35	855.53	51.10	8,502.73
	Total head III ... ..	...	10,508.52	8,203.31	1,446.77	63.71	20,222.31

Railways Administrations in India and Railways comprised in each administration on 31st March 1918.

Serial No.	Name of administration and of Railways comprised in each system.	Classified head.	Route—miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	2'—0" Gauge.	Total.
	IV.—COMPANY GUARANTEED BY AN INDIAN STATE.						
	<i>The Nizam's Guaranteed State Railway Company—</i>						
	N. G. State Railway	(c) XIII	330.13	.....	.....	.....	.....
	Bezwada Extension	(b) II	21.47	.....	.....	.....	.....
	Hingoli Branch	(c) XII	.....	50.31	.....	.....	.....
	Hyderabad-Godawari Valley Ry.	(e) XIII	.....	391.13	.....	.....	.....
	Secunderabad-Gadwal	(c) XII	.....	103.30	.....	.....	.....
	Total ... ..	...	351.60	544.74	.....	.....	896.34
	V.—SUBSIDIZED COMPANIES WORKING STATE RAILWAYS JOINTLY WITH THEIR OWN LINES.						
25	<i>B. & N. W. Railway Company—</i>						
	B. & N. W. Railway	(e) VI	.....	1,241.65	.....	.....	.....
	Tirhut State Railway	(b) II	.....	785.28	.....	.....	.....
	Sagauli-Raxaul	(f) II	.....	18.72	.....	.....	.....

	Cawnpore-Burhwal	...	...	(b) II	.....	80-34	.....	.....	.....
	Oudh and Rohilkhand	...	...	(b) II	.....	2-18	.....	.....	.....
	Total	...	...	...	.....	2,128-17	.....	.....	2,128-17
26	<i>Rohilkhand and Kumaon Railway Co.—</i>								
	Rohilkhand and Kumaon Railway	...	...	(e) VI	.....	258-72	.....	.....	.....
	Lucknow-Bareilly	...	...	(b) II	.....	312-43	.....	.....	.....
	Powayan Light Railway	...	...	(e) VI	.....	.....	38-86	.....	.....
	Total	...	...	...	.....	571-15	38-86	.....	610-01
	Total head V	...	...	...	.....	2,699-32	38-86	.....	2,738-18
	VI.—COMPANIES ADMINISTERING THEIR OWN RAILWAYS—								
27	Ahmadpur-Katwa Railway Company	...	...	(e) III	.....	.....	32-26	.....	32-26
28	Arrah-Sasaram	...	...	(e) X	.....	.....	65-16	.....	65-16
29	Assam Railways and Trading Co:—								
	Dibru-Sadiya	...	...	(e) VII	.....	86-02	.....	.....	.....
	Ledo and Tikak Margherite Colliery	...	...	(e) VIII	.....	5-50	.....	.....	91-52
30	Bakhtiarpur-Bihar	...	...	(e) X	.....	.....	33-00	.....	33-00
31	Bankura-Damoodar	...	...	(e) III	.....	.....	59-95	.....	59-95
32	Baraset-Basirhat	...	...	(e) X	.....	.....	52-24	.....	52-24
33	Barsi Light Railway	...	...	(e) VI	.....	.....	117-50	.....	117-50

APPENDIX No. 16.—(Concluded).

Railway administrations in India and Railways comprised in each administration on 31st March 1918.

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INDIAN RAILWAYS.

Serial No.	Name of Administration and of Railways comprised in each system.	Classified head.	Route—miles on 31st March 1918.				
			5'—6" Gauge.	3'—3½" Gauge.	2'—6" Gauge.	2'—0" Gauge.	Total.
34	Bengal Doars Railway Company ...	(e) X	.....	36·40	.....	.....	.....
	Extensions	(e) VI	.....	116·56	.....	.....	152·96
35	Bengal Provincial Railway Coy.—	VIII	.....	.....	33·27	.....	.....
	Dasghara-Jamalpur Ganj	(e) III	.....	.....	8·31	.....	41·58
36	Burdwan-Katwa	(e) III	.....	.....	32·52	.....	32·52
37	Darjeeling-Himalayan	(e) VII	.....	.....	.....	51·00	.....
	Extension	(e) IV	.....	.....	.....	95·44	146·44
38	Dehri-Rohtas	(e) VI	.....	.....	23·83	.....	23·83
39	E. I. Distilleries Sugar Factories Limited, Madras	(e) VIII	.....	.....	.....	18·00	18·00
40	Guzerat Railways Company:—						
	Champaner-Shivrajpur—Pani Light Railway	(e) IV	.....	.....	32·40	.....	.....
	Godra-Lunavada	(e) IV	.....	.....	25·45	.....	.....
	Nadiad-Kapadvanj	(e) IV	.....	.....	28·01	.....	85·86
41	Howrah-Amta	(e) X	.....	.....	.....	43·87	43·87
42	Howrah-Sheakhala	(e) X	.....	.....	.....	19·75	19·75
43	Jagadhri Light Railway	(e) VIII	.....	.....	.....	3·31	3·31
44	Jessore-Jhenida	(e) X	.....	.....	36·75	.....	36·75
45	Kalighat-Falta Railway Company ...	(e) III	.....	.....	25·33	.....	25·33

46	Madaya Light Railway	...	...	(e) VIII	.....	.....	16-00	.....	16-00
47	Shahdara-Saharanpur	...	...	(e) VI	.....	.....	92-50	.....	92-50
48	Tezapore-Balipara	...	...	(e) X	.....	.....	20-10	.....	20-10
Total head VI				...	.....	244-48	734-58	231-37	1,210-43
Grand Total I to VI				...	17,876-27	15,025-58	2,802-23	629-39	36,333-47
49	Calcutta Port Commissioners' Ry.	...	...	...	15-34	.....	.....	.....	15-34
50	Bombay Post Trust Railway	...	...	...	6-00	.....	.....	.....	6-00
					17,897-61	15,025-58	2,802-23	629-39	36,354-81

(a) Old Guaranteed Companies' lines purchased by Government with or without extensions made by Government.

(b) State Railways constructed by Government.

(c) Indian State Railways.

(d) State Railways constructed through Agency Companies.

(e) Other Companies' lines under classified heads.

(f) " " " purchased by Government.

(g) District Boards' Railways.

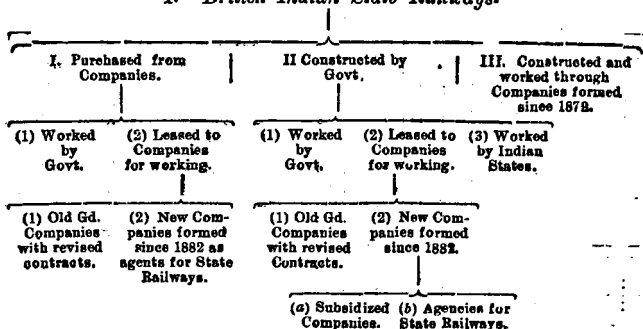
a, b, d, f, are State Railways.

NOTE 1.—The Roman figures in Column 3 indicate the head of classification by the Railway Board as shown in Appendix 17.

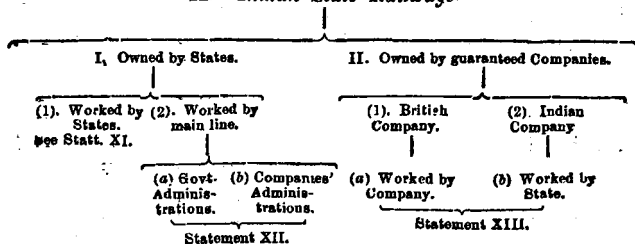
NOTE 2.—424 Miles of open line track were dismantled during the year 1917-18, in order to provide rails for the war. The lines dismantled were the whole of the Sutlej Valley Railway and small portions of N. W., E. I., M. & S. M. and O. & R. Railways (Administration Report, Vol. I page 29 for 1917-18 and page 14 for 1919-20).

APPENDIX 15.

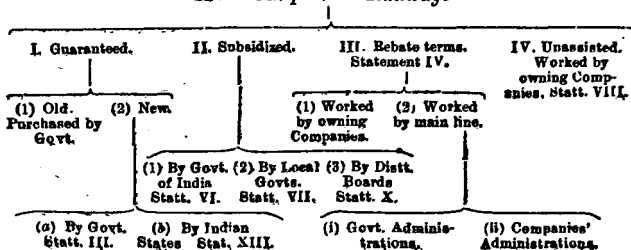
I.—British Indian State Railways.



II.—Indian State Railways.



III.—Companies' Railways.



APPENDIX 17.—Mileage and Capital cost of Indian Railways on 31st March 1918.

Classification of Railways.	Open mileage.	Capital liability for State Railways & capital cost in thousands of rupees provided by—				REMARKS.
		Government and Local Bodies.	Indian States.	Companies.	Total.	
I. State Rys. worked by State.	7,112.07	1,61,47.14	1,61,47.14	(a) Total of Appendix 5 to Ry. Board's Administration Report ... 367,436,689 Less share of Travancore State... 461,557 £366,977,132 = = Rs 5,50,46,56,980
II. Ditto worked by Companies	19,071.87	2,97,86.49	.....	91,12.94	3,88,99.43
III. Companies under guarantee	26,183.44	4,59,33.63	.....	91,12.94	5,50,46.57
IV. " on Rebate Terms	190.41	..	.....	1,23.28	1,23.28
V. " on guarantee and Rebate	1,828.04	...	.....	14,22.01	14,22.01
VI. Companies subsidized by Government of India	87.93	99.23	99.23	Totals of heads III to XIV given in Appendix 4 to Railway Board's Administration Report for 1917-18 = Rs. ... 66,04,56,000
VII. Companies subsidized by Local Governments	2,208.56	...	.....	16,08.87	16,08.87
VIII. Unassisted Companies	137.02	...	.....	1,63.45	1,63.45
IX. District Board Railways	76.08	...	.....	33.50	33.50
X. Companies subsidized by District Boards	214.14	1,07.61	.....	...	1,07.61
XI. I.S. Rys. worked by I.S.	307.27	1,46.51	1,46.51	Add South Behar Company included in (b) ... 1,19,77,000 Add Share of Travancore State included in (c) ... 1,67,42,000 68,91,77,000 Add (a) 5,50,46,56,980 Total 6,19,38,38,980
XII. " worked by Main Line.	2,478.80	...	9,50.29	...	9,50.29	
XIII. Companies guaranteed by Indian States	1,788.18	...	11,61.35	...	11,61.35	
XIV. Rys. in foreign territories worked by British Companies	760.00	...	.....	8,68.27	8,68.27
	73.60	2,07.40	2,07.40	
Total	36,833.47	4,60,41.24	21,11.64	1,37,85.46	6,19,38.34	

APPENDIX 17.

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APPENDIX I.

State Railways worked by the State

Name of Railway.	Mileage open on 31st March 1918.	Capital liability on 31st March 1918.	Percentage of net earnings on capital outlay for last three years.
1. Eastern Bengal—		£	
Broad-gauge ...	569.26	25,745,757.	{ 4.04
Metre-gauge ...	977.72		{ 4.34
2'-6" Gauge ...	35.10		{ 3.57
	1,582.08		{ 3.67
2. North Western—			
Broad-gauge ...	3,690.27	60,878,448	{ 4.41
2'-6" gauge ...	297.45		{ 5.94
	3,987.72		{ 7.90
3. Oudh & Rohilkhand.			
Broad-gauge ...	1,590.77	18,851,052	5.28
Metre-gauge ...	Shown in Appd. II.		7.02
4. Jorhat (Assam Provincial Ry.)			
2'-0" gauge ...	32.50	74,150	{ 5.04
Miscellaneous Expenditure ...	.....	2,472,791	{ 5.62
			{ 2.07
Total ...	7,112.07	£107,647,626	
Equivalent in rupees at £1 = Rs.15.		= Rs. 1,614,714,390	

APPENDIX II.—*State Railways worked by Companies*

RAILWAY.	Open mileage 31st March 1918.	Gauge.	CAPITAL LIABILITY IN THOUSANDS OF POUNDS.		Working Company.
			Total.	Subscribed by Company.	
E. I. Ry. System	2,464	5'-6"	55,844	D.18,500	E.I.Co.
S. I. Ry. System	{ 446 881 25	{ " 3'-3 3/8" 2'-6"	{ 12,672	{ S. 1,000 D.2,766	S. I. Co.
Tinnevely-Quilon	50	3'-3 3/8"	117	D. 114	Do.
Nilgiri ...	29	"	287	.....	Do.
Dharampuri- Hosur	73	2'-6"	142	.....	Do.
G. I. P. Railway	{ 2,553	{ 5'-6"	{ 57,232	{ S. 2,575	G. I. P. Co.
Indian midland			3,243	D. 3,500	
Agra-Delhi-Chord	126	5'-6"	991	.....	Do.
Baran-Kotah ...	40	"	328	.....	Do.
Itarsi- Hoshangabad	13	5'-6"	273	.....	Do.
Cawnpore-Banda	76	"	533	.....	Do.
B.B. & C.I. Ry.Syst.	{ 997 1,822	{ 5'-6" 3'-3 3/8"	{ 35,724	{ S. 2,000 D.1,000	B. B. & C. I. Company.
Palampur-Dessa	17	"			
Broach-Jambusar	30	2'-6"			
M.&S.M.Ry.System	{ 1,032 1,518	{ 5'-6" 3'-3 3/8"	{ 30,290	{ S. 5,000 D.4,825	M. & S. M. Company
Mysore State Ry.	296	"	1,200	D. 1,200	Do.
Dhone-Karnool Railway ...	32	"	68	.....	Do.
B. N. Ry. System	{ 1,889 798	{ 5'-6" 2'-6"	{ 28,499	{ S. 2,995 D.7,874	B. N. Co.
Tumsar-Tirodi...	51	2'-0"			

with Boards in London, vide Section 6 (a) of Chapter VI.

Dates of principal Contracts.	FIXED INTEREST ON CAPITAL		SURPLUS PROFITS.		Expiry of Contract.	REMARKS.
	of Government.	of Company.	Government Share.	Company's Share.		
22-12-1879 14-11-1899	4%	4%	$\frac{1}{15}$	$\frac{1}{15}(a)$ $\frac{1}{15}(b)$	31-12-1924	a. Profits up to 25 lakhs b. Excess beyond 25 lakhs. Chairman- Lt. Col. R. Gardiner
24-11-1890 2-3-1909 21-12-1910 ...	3½%	Guarantee 3½% plus ½% surplus in 1911 to 1913	In proportion to Capital subscribed by each		31st December 1945	Chairman— Sir. H. Kimber, Bart. M. P., Managing Director—Mr. N. Priestley.
21-12-1900						Chairman—Col. F. Firebrace R.E.
5-2-1909						
19-3-1909						
21-12-1900 8-5-1914	3%	3%	$\frac{1}{20}$	$\frac{1}{20}$	30th June 1945 30th September or 31st March in any year. 30-6-1925 30th September or 31st March in any year.	
1-4-1907 24-10-1913	4% if earnings admit of it	3 per cent., guaranteed with 1 per cent. extra if earnings admit of it.	In proportion to capital subscribed by each		31-12-1941 or any succeeding 5th year	Chairman—Major A.D. Shelley.
1-6-1882 26-6-1908 ...	..... ..... .....	3½% guarantee in gold.			31-12-1937	Chairman—Col. W. V. Constable R.E.
15-9-1911	.....	.....	whole	Nil.	30th June or 31st December of any year.	See Section 6 of Chapter VI.
9-3-1887 5-11-1912	3½%	3½%	$\frac{1}{4}$	$\frac{1}{4}$	31-12-1950	Chairman—Robt. Miller Esq., Managing Director—Sir. T. R. Wyne K.C.S.R. K.G.E.E.

APPENDIX II.—(Contd.)—State Railways worked by Companies

RAILWAY.	Open Mileage on 31st March 1918.	Gauge.	Capital liability in thousands of £		Working Company.
			Total.	Subscribed by Company.	
Assam-Bengal Ry.	869	3'-3 $\frac{3}{8}$ "	10,637	{ S 1,500 D. 906 }	A. B. Co.
Burma Railway ...	1,342	"	11,685	{ S 3,000 D 1,250 }	Burma Rys. Company.
Burma Railway Extensions	187	3'-3 $\frac{3}{8}$ "	2,491	.....	Do.
Southern Shan States Railway	69	3'-3 $\frac{3}{8}$ "			
Tirhut State Ry.	804	3'-3 $\frac{3}{8}$ "	5,341	.....	B. & N. W. Ry. Coy.
O. & R. Railway Cawnpore- Burhwal	80	"	Included in Appendix I.	.....	Do. }
Benares Cantt. to City ...	2	"			
Lucknow—Bareilly State Railway	312	"			
Jodhpur-Hyderabad British Sec- tion ...	124	"	301	.....	J. B. Ry.
Bezwada Exten- sion ...	21	5'-6"	83	.....	N. G. S. Ry. Company.
Total ...	19,071	...	259,329	{ 18,270 42,483 60,753 }	Shares Debentures
Thousands of Rs.	...	...	3,88,99,43	91,12,94	.

with Boards in London, vide Section 6 (a) of Chapter VI, p. 344-50.

Dates of principal Contracts	Fixed interest on Capital		Surplus profits.		Expiry of Contract.	Remarks.	
	of Government.	of Company.	Government Share.	Company's Share.			
26-4-1892	3 p.c.	3%	In ratio of Capital expended by each.		31-12-1921	Chairman Sir F. R. Upcott, K.C.V.O., C.S.I. Chairman—Col. A., G. Begbie. Managing Director—W. Home Esq., C.I.E.	
9-3-1897	2½ per cent. on assumed Capital of £5,750,000	2½ per cent. on £3,000,000 Share Capital			31st December 1928.		
22-2-1907	3½ p.c.	...					30-6-1919 or a subsequent fifth year.
7-4-1913		...					
Contract	not published.		See page 355.	
18-2-1890	5 %	...	Up to ten lakhs	...	31st December 1919.		
14-12-1905			Excess beyond ten lakhs.	...			
			1½ths	1½th			
21-2-1902	See Chapter VI, Section 6 (a)	
8-9-1890	4 %	4 %	In ratio of their respective shares of capital		31st December 1932.		
5-2-1901					1st April or 1st October in any year.		
22-12-1900	...	...	...	...	1 January or 1st July in any year on six months' notice from either side
6-4-1909	...	...	whole	...	

APPENDIX III.—*Railway Companies under new
see Section 6 (c) of Chapter VI, page 361.*

NAME OF COMPANY.	Contract date.	First opening.	Length Miles	Gauge.	Capital Cost in Thousands of rupees.	Dividend per cent. earned.
				ft. in.		
Hardwar-Dehra (1) ...	26-3-97	1900	32	5—6	30,40	9.15
Burdwan-Katwa ...	1-12-15	1917	33	2—6	17,98	3.75
Ahmadpur-Katwa ...	.....	1917	32	2—6	19,50	2.33
Bankura-Damodar River	.....	1916	60	2—6	35,57	2.31
Kalighat-Falta ...	.....	1917	25	2—6	17,37	5.03
Dasghara-Jamalpur-ganj	.....	1917	8	2—6	2,46	5.38
Total ...	.....	...	190	...	1,23,28	...

IV.—*Railway Companies under Rebate Terms, vide Section 6*

South Bihar ...	7-8-95	1899	79	5—6	1,19,77	4.38
	11-12-06					
Southern Panjab—						
Main line ...	13-8-95	1897	426	5—6	2,73,85	11.20
Ludhiana Extension	4-10-05	1905	152	5—6	93,30	5.37
Sutlej valley ...	24-6-09	1910	208	5—6	1,53,12	5.77
Jullundar-Doab ...	9-7-12	1912	130	5—6	1,32,44	5.82
Mymensing-Jamalpur						
Jagannathganj (2)	6-1-97	1898	56	3—3½	26,80	11.35
Darjeeling-Himalayan						
Extension	25-4-14	1914	95	2—0	53,77	3.09
Central Provinces						
Ry. Co.						
Elichpur-Yeotmal	27-3-16	1913	118	2—6	83,86	3.76
Pulgaon-Arvi	.....	1917	22			
Dhond-Baramati ...	.....	1914	27	2—6	11,62	5.03
Carried over ...	.....	...	1,313	...	9,48,53	...

*guarantee from Government of India. For further particulars,
Land given free by Government in all cases.*

Working agency,	Working Expenses P. & C. of gross Receipts	Rebate per cent. of gross Receipts.	Guaranteed interest per cent.	Surplus profits,		Expiry of Contract.	Purchase Price,	Agents or Chairman,
				Government Share.	Company's Share.			
O. & R. Ly.	50	...	3	1/2	1/2	31-12-19 31-3-46	25 times average yearly net earnings for preceding 8 years, subject to a Maximum of 120 and Minimum of 100 per cent of Capital expenditure.	(1) Messrs. Gillanders, Arbuthnot & Co., Calcutta.
Owning Company.	3 1/2 to 5	1/2	1/2	Contracts not published.		
	}	}	}			
						
						
						

(d), Chapter VI, p 362-68 Land given free by Government in all cases.

E. I. Ry.	45	30	4	Nil.	whole	30-6-19	£ 684,580 as subscribed Capital.	Sir H. S. Canningham, London.
N. W. Ry.	52	As much as whole.	$3\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	31st Dec. 1929, or 1934, or 1944, or 1954. (a)	Same as in appendix III, average of 5 years, instead of 8. (a) Capital expenditure only.	Sir Bradford Leslie K.C.I.E., London.
			$3\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$			
			$3\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$			
			$4\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$			
E. B. Ry.	45	As much as whole.	$3\frac{1}{2}$	Nil.	whole	31-12-19	Same as in Appendix III.	(2) Demolition transferred from Calcutta to London in 1919.
D. H. Ry. Coy.	50		5	$\frac{1}{2}$	$\frac{1}{2}$	31-3-46		
G.I.P. Ry.	45	As much as whole.	6	$\frac{1}{2}$	$\frac{1}{2}$	31-3-45		
G.I.P. Ry.	...		Contract	not	published.			
.....	

APPENDIX IV.—(Continued)—*Railway Companies under
Chapter VI, pages 362-68. Land*

NAME OF COMPANY.	Contract date,	First opening	Length, Miles	Gauge Ft. inch	Capital Cost in thousands of rupees.	Dividend per cent. earned.
Brought forward ...	.....	...	1313	...	9,48,53	...
Ahmedabad-Prantelj	13-3-96	1897	89	3—3 $\frac{3}{8}$	37,23	9.50
	24-11-10					
Tapti Valley ...	28-8-96	1898	156	5—6	1,32,37	8.50
	1-3-21					
Ahmedabad-Dholka...	25-3-02	1903	34	3—3 $\frac{3}{8}$	11,18	6.20
	12-11-08					
Amritsar-Patti ...	22-5-05	1906	54	5—6	34,06	7.75
Guzrat Rys. Company						
Godhra-Lunavada	30-4-14	1913	25	2—6	12,97	0.95
Nadiad-Kapadvanj	30-4-14	1913	28	2—6	14,89	7.92
Champaner-Shivraj-						
pur-Pani	1-4-15	1911	33	2—6	16,25	2.15
Mandra-Bhon ...	15-10-14	1915	46	5—6	23,97	4.75
Sara-Sirajganj (3) ...	14-4-16	1915	53	5—6	86,49	...
Upper Sind Light Ry.						
Jacobabad-Kashmor	29-7-16	1914	77	2—6	21,85	4.55
Hoshiarpur Doab Ry.						
Jallundar-Mukerian	2-2-17	1915	45	5—6	28,89	2.28
Phagwara-Rahon	2-2-17	1915	45	5—6	25,76	4.87
Sialkot-Narowal ...		1915	38	5—6	27,57	4.87
Total ...	.....	...	2036	...	14,22,01	...
Deduct Sutlej Valley dismantled in 1917-18	.....	...	208	5—6	.....	...
Total ...	.....	...	1828	...	14,22,01	...

* Guzrat Rys. Co.—25 times the average net earnings of the last preceding 3 years.

V.—Branch line Companies under

Mymensingh-Bhairab Bazar	1917	88	3—3 $\frac{3}{8}$	99,23	...
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Rebate Terms. For further particulars, see Section 6 (d) of given free by Government in all cases.

Working agency.	Working Expenses P. a. of gross Receipts.	Rebate per cent. of gross Receipts.	Guaranteed interest per cent.	Surplus profits.		Expiry of Contract.	Purchase Price.	Agents.
				Government Share.	Company's Share.			
B. B. & C. I. Railway	44	10	5	Nil.	Whole.	31-12-30	25 times the average yearly net earnings during last preceding 5 or 3 years, Maximum 120, Minimum 100% of total Capital outlay.*	Messrs. Killick Nixon & Co., Bombay.
	55	10	8			31-12-31		
	44	45	4			30-6-22		
N.W.Ry.	45	45	5	$\frac{1}{2}$	$\frac{1}{2}$	31-12-35		
Owning Company	...	as much as whole.	5	$\frac{1}{2}$	$\frac{1}{2}$	31-12-44		
	...		5	$\frac{1}{2}$	$\frac{1}{2}$	31-3-47		
N.W.Ry.	50		5	$\frac{1}{2}$	$\frac{1}{2}$	31-3-46		
E.B.Ry.	50		5	$\frac{1}{2}$	$\frac{1}{2}$	31-3-45		
N.W.Ry.	45		5	$\frac{1}{2}$	$\frac{1}{2}$	31-3-46		
N.W.Ry.	50		5	$\frac{1}{2}$	$\frac{1}{2}$	31-3-46		
N.W.Ry.	Contract		not	published.				
.....	
.....	
.....	

or 115 per cent. of the total capital expenditure, whichever may be greater.

Guarantee and Rebate combined.

A.B.Ry. Company	Contract	not	published.		
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Appendix VI.—Companies' Railways subsidized by the Govern-

NAME OF COMPANY.	Date of contract.	Year of first opening.	Length.		Gauge.	Capital Thousands of Rupees.	Dividend earned. per cent. on Capital.
			Miles.	Ft. In.			
R. & K. ...	12-10-82	1884	259	3-3 $\frac{3}{8}$		1,68,16	7.42
B. & N. W. ...	12-12-82 22-2-86	1884	1242	3-3 $\frac{3}{8}$		9,78,24	6.81
D. U. K. ...	12-2-89 9-6-97	1891	206	5-6		1,95,27	9.67
Powayan ...	18-12-89 1-7-01	1890	39	2-6		8,95	4.47
Barsi Light Ry.	1-8-95	1897	118	2-6		86,03	4.83
Bengal Doars Ex- tension ...	2-3-98 6-7-16	1901	116	3-3 $\frac{3}{8}$		1,08,54	7.15
Shahdara-Sahranpr	11-10-05	1907	92	2-6		44,63	8.31
Dehri-Rohtas ...	13-10-07	1911	24	2-6		6,70	20.77
Matheran ...	30-10-09	1907	13	2-0		11,43	2.32
Sind Light Ry— Mirpur-Khas Jhudo	13-7-11	1909	50	3-3 $\frac{3}{8}$		7,32	11.21
Do. Khadro	9-6-13	1912	50	3-3 $\frac{3}{8}$		8,23	6.22

ment of India, see Section 6 (b) of Chapter VI, pages 350—61.

Government aid.	Working Agency.	Working expenses per cent. of Gross receipts.	Fixed interest per cent.	Surplus Profits.		Expiry of Contract.	Purchase price.
				Government Share.	Company's Share.		
Land free and Subsidy	Owning Company	...	6	$\frac{1}{2}$	$\frac{1}{2}$	31-12-32	25 times the average yearly net earnings less Government share of Surplus 3 or 5 years preceding purchase.
Land free	Owning Company	...	6	$\frac{1}{2}$	$\frac{1}{2}$	31-12-32	Chairman—Alex. List Esq., C.I.E.
Land free	E. I. Ry.	48	$3\frac{1}{4}$	Nil	whole	31-12-26	25 times ditto. See Kalka Simla Ry. page 860.
Free use of Govt. road.	R.&K. Ry	60	...	...	whole	31-12-27	Value of property as a dividend earning investment, with an additional bonus of 20 per cent. over such value.
Land mostly free.	Owning Company	...	...	...	whole	1-1-44	Par value in British territory; 5 per cent. in excess of capital expenditure in Nizam's territory.
Land free	"	...	...	...	...	31-12-19 30-6-26	Chairman—G.A. Anderson, Esq. 25 times annual average earnings. Maximum 120, Minimum 100 per cent. of capital outlay.
Land and portion of local road free.	"	...	4	$\frac{1}{2}$	$\frac{1}{2}$	15-10-18 15-10-25	Chairman—Robt. Miller Esq. Ditto. Maximum 125. Agents—Messrs. Martin and Co. Calcutta.
Free use of road.	"	...	...	...	whole	13-10-28	20 times ditto. Maximum 125. Agents—Messrs. Octavius Steel & Co., Calcutta.
Govt. Land free	G.I.P. Ry.	Actual expenses	...	...	"	On six months' Notice.	25 times ditto. No Maximum or Minimum.
Land free	J.B. Ry	40	...	...	"	31-12-28	25 times ditto. Maximum 120.
						1-1-33	

Appendix VII.—Companies subsidized by

Name of Company.	Date of Contract.	Year of first opening.	Length. Miles	Gauge.	Capital cost in thousands of Rupees.	Dividend earned.	Government aid.
Darjeeling-Himalayan ...	8-4-79	1890	51	Ft. In. 2-0	46.07	6.43	Land free & cash Subsidy.
Dibru-Sadiya ...	26-5-80 28-10-14	1882	86	3-3½	1,17,38	3.97	Do.
Total ...	...	...	137	...	1,63,45	...	.....

VIII.—Unassisted Companies.

Ledo and Tikak Margherita Colliery Ry. ...	30-7-81 26-2-08	1884	5½	3-3½	16,94	2.18	Mines and premises leased to the Coy. at a fixed rental.
Bengal Provincial Ry.	16-10-90	1894	33	2-6	11,98	3.78	Part of land allowed free.
Jagadhri State Ry. ...	15-12-09	1911	3-3	2-0	1,12	1.40	.....
Kulasekara-patnam-Light Railway ...	19-6-14	1915	18	2-0	3,46	15.82	Government land at annual rental of Rs. 10 per mile.
Madaya Light Ry. ...	13-2-06	1912	16	2-6	...	...	Land rented at Rs. 250 annually per track-mile for 3 years and Rs. 400 per mile thereafter.
Total ...	...	...	76	...	33,50	...	.....

Local Governments. Every one working its own Railway.

Fixed interest per cent.	Surplus profits.		Expiry of Contract.	Purchase price.	Agents.
	Government share.	Company's share.			
5	...	whole.	4-5-09 or at intervals of 10 years thereafter.	20% in excess of the value as a dividend paying investment.	Messrs: Gillanders Arbuthnot & Co., Calcutta.
5	½	½	5-2-21 or ditto.	Ditto.	Assam Ry. and Trad- ing Coy., London.
...

Every one working its own Railway, pages 368-69.

...	...	whole.	Not specified.	Fair value.	Assam Railways and Trading Company.
...	...	do.	After 4 January 1917.	2/5ths in excess of capital outlay.	
...	...	...	11-8-82.	25 times average an- nual net earnings. Maximum 120 Minimum 100 per cent. of capital outlay.	
...	...	whole.	19-6-1964.	.....
...	...	do.	13-2-1948.	Fair market value.	
...	

Appendix IX.—Railways belonging to District

Name of Board and Railway.	Date of first open- ing.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of rupees.	Divi- dend per cent 1915-16 1916-17.	WORKING-	
						Agency.	Date of Agree- ment.
TANJORE DISTRICT.							
Mayavaram-Arantangi ...	2.4.94	112	3-3½	66.21	7.85 6.58	S. I. Ry. Co.,	22-7-97
KISTNA DISTRICT.							
Bezwada-Masulipatam ...	4.2.08	52	5-3½	22.29	10.40 9.45	M & S M Ry. Co.,	4-2-08 26-6-08
GUNTUR DISTRICT.							
Tenali-Repali ...	18.3.16	21	5-6	14.86	0.18 3.75	"	...
SALEM DISTRICT.							
Burmangalam Salem ...	1.6.17	4	5-6	4.72	...	S. I. Ry.	...
COIMBATORE DISTRICT.							
Podanur-Pollachi ...	15.10.15	25	3-3½	11.37	3.08 7.82	"	...
Total ...	...	214	...	1,19.45	...	...	...
Calcutta Port Commis- sioners' Railway ...	1.11.75	15	5-6	...	...	...	...
Bombay Port Trust Ry. ...	1.1.15	6	5-6	...	...	...	...

Boards and Port Trusts.

ARRANGEMENTS.		Remarks.
Terms for working.	Expiry of Agreement.	
Working expenses charged at the same percentage on gross receipts as is incurred on S. I. Ry. plus cost of any damage, plus 5 per cent. of gross receipts for use of rolling stock.	31st December in any year, on 12 months' previous notice.	Half of the funds have been provided by the Madras Government from Provincial sources and the other half by the District Board by enhancing the local land cess from 8 to 12 per rupee and by debenture, loan at 4 per cent. interest.
Working expenses charged at 45 per cent. of the gross earnings, plus cost of New Minor Works. Rebate up to 10 per cent. of the Main Line earnings from traffic interchanged with the Branch, to make up a return of $3\frac{1}{2}$ per cent. on capital outlay.	31st December 1937 or any succeeding fifth year.	Government gave the land free of cost, reserving their right to acquire the railway after 30 years at a price of 25 times the average net earnings, not exceeding 120, nor less than 100 per cent. of capital cost.
Contract not published.		
" " "		
" " "		
Owned and worked by the Port Trust. Calcutta Trust pays a quit rent of Rs. 37,292 per annum for the land.		
Owned and worked by the Port Trust.		

Appendix X.—Railway Companies subsidized by

Name of District Board and Railway.	Date of Contract	Date of First opening	Length. Miles	Gauge. Ft. In.	Capital Cost in thousands of Rupees.	Dividend per Cent. last 3 years.	Subsidy.
JALPAIGURI DIST. Bengal Doars ...	27.4.91	15.1.91	86	3—3½	83.15	7.07 7.37 7.15	Free land and annual Subsidy of Rs. 4,000.
Howrah-Amta ...	26.3.95	1.7.97	44	2—0	26.52	9.68 10.15 10.40	Free use of roads for 20-21 years and cash Subsidy to make up 4 per cent. per Annum.
Howrah-Sheakhala	26.3.95	2.8.97	20	2—0	7.64	8.06 8.56 8.55	
TEZPORE DISTRICT. Tezporé-Balipara Steam Tramway	1.6.95	9.8.94	20	2—6	4.87	9.12 9.55 6.16	
24 PARAGANAS. Baraset-Basirhat ...	14.12.97	1.2.05	52	2—6	93.85	6.40 5.69 3.89	Land mostly free, free timber from Govt. forests for sleepers for first construction, Subsidy of Rs. 5,000 yearly up to 1914.
PATNA DIST. Bakhtiarpur-Bihar	21.8.99	1.7.03	83	2—6	18.84	8.08 4.57 6.09	Free use of District Road & Cash Subsidy to make up 4 per cent. on Capital.
SHAHABAD DIST. Ara-Sasaram ...	15.10.09	6.3.11	65	2—6	22.67	3.46 4.42 6.01	Ditto.
JESSORE DISTRICT. Jessore-Jhenidah ...	26.5.13	1.10.13	37	2—6	13.97	...	Ditto.
Total ...	...	...	307	...	1,46.51	...	.....

District Boards, Each Company working its own line.

Fixed rate of interest per cent.	Surplus profits.		Expiry of Contract.	Purchase Price.	Agents.
	District Board's Share.	Company's Share.			
5	...	...	31-12-19	1 $\frac{1}{2}$ ths of invested Capital.	Board in London.
4	$\frac{1}{2}$ $\frac{1}{2}$	$\frac{1}{2}$ $\frac{1}{2}$	26th March 1916 or at end of every seven years thereafter.	Value as a dividend earning invest- ment with a bonus of 20 per cent. thereon. Value of whole line plus a bonus of 20 per cent., by District Board, Howrah; if purchased by D. B. Hooghly, 15 per cent. bonus.	Messrs. Walsh Lovett & Co., Agents of Bengal District Roads Tramway Company.
...	Nil.	Whole	1909 there after at terms of 7 years each.	Same as Howrah Amta Railway.	.....
4	$\frac{1}{2}$	$\frac{1}{2}$	15-5-24	Twenty times the average annual net profits during 4 years preced- ing purchase, with a bonus of 20 per cent. thereon.	Messrs. Martin & Co., Calcutta.
4	$\frac{1}{2}$	$\frac{1}{2}$	25-6-22	Ditto.	Ditto.
4	$\frac{1}{2}$	$\frac{1}{2}$	8-9-34	Ditto. average of 8 years.	Ditto.
4	$\frac{1}{2}$	$\frac{1}{2}$	31-3-43	Ditto. Ditto.	.....
...		

Appendix XI.—Indian State Railways worked by Indian

Name of Railway.	Date of first opening.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of Rupees.	Dividend per cent. in 1915-16.
Morvi State Railway	11-3-80	74	3-3½	53.77	9.15
	24-3-87	19	2-6		
Bhavnagar State Railway	20-12-80	206	3-3½	1,23.82	6.45
Dhrangadhra State Railway	1-6-93	43	"	14.12	5.13
Gondal-Porebandar	19-6-81	148	"	76.48	7.21
Jetalsar-Rajkot	12-4-93	46	"	16.53	14.18
Jodhpur State Railway	24-6-82	609	"	2,04.44	13.07
Piper-Bilara	25-11-10	25	2-0	2.90	4.30
Bikaner State Railway	9-12-91	498	3-3½	1,21.04	8.66
Junagad State Railway	1-9-88	121	"	73.58	5.33
Udaipur-Chitorgarh	1-8-95	67	"	22.84	6.77
Jamnagar State Railway	8-4-97	54	"	24.26	6.08
Gawalior State Railway	2-12-99	250	2-0	75.92	3.42
Cutch State Railway	18-5-05	37	2-6	11.43	4.82
DHOLEPUR STATE RAILWAYS.					
Dholpur-Bari	2-42-08	36	2-6	12.93	2.44
Mohari-Berauli	10-2-17	15			
BARODA-STATE.					
Khijadiya-Dhari	1-3-13	37	3-3½	19.54	0.14
MYSORE STATE RAILWAYS.					
Kolar District	15-12-13	64	2-6	18.74	0.87
Tarikere-Narsimharajapura	15-1-15	27	2-0	5.14	...
Mysore-Aasikere	3-1-18	103	3-3½	81.12	...
Total ... ..	...	2,473	...	9,58.40	...

States—the owning States except where otherwise remarked.

REMARKS.

Originally constructed on 2 ft.—6 in. gauge; converted to 3 ft. 8½ in. on 4th March 1905.

Worked by the Bhavnagar Durbar.

Worked by the Gondal—Porebandar States.

Constructed and worked jointly by the two Durbars under agreements dated 18th and 30th July 1889 between the Government of India and the Durbars (Appendices M and N to the Administration Report for 1889—90, Part II).

Worked by the G. P. Ry. for 35 to 40 per cent. of gross earnings (subject to a biennial revision) plus actual expenditure on maintenance of Way, Works and Stations, Police charges, joint expenses at Khajadia Junction, and 5 per cent. of gross earnings for hire of Rolling Stock.

Owned jointly by the Mysore Durbar and the Kolar District Board.

Appendix XII.—Indian State Railways worked

Name of State and of Railway.	Date first opening.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of Rupees.	Dividend per cent. in 1915-16.	Work- ing Agency.	Date of Work- ing Agreement.
1 BARODA STATE.							
Dabhoi Railway ...	8.4.73	153.94	2-6	62.60	5.17	B. R. & C. I. Ry. Company.	1.1.97
Bodeli-Chhota—Udaipur ...	1.12.17	22.56	„		...		
Kosamba-Zankhva ...	1.5.12	26.10	„	13.29	Loss.		6.12.15
Petlad-Vaso ...	10.12.14	19.25	„	9.00	1.67		17.11.14
Bilimora-Kalamba ...	23.7.14	34.93	„	15.53	0.22		17.6.15 23.10.14
Mehsana lines ...	21.3.87	162.63	3-3½	69.04	5.75	„	17.6.93
Vijapur-Kalol-Kadi ...	10.6.02	46.11	„	16.32	5.21	„	17.6.93
Petlad-Cambay (Anand- Tarapur) ...	5.5.90	21.42	5-6	12.84	11.52	„	5.5.90 16.5.10
2 MYSORE STATE.							
Mysore-Nanjangad ...	1.12.91	15.80	3-3½	6.61	6.85	M. & S. M. Ry. Company.	14.12.99
Birur-Shimoga ...	1.12.99	37.92	„	24.38	„		2.12.99
Hindupur (Yeshwantpur)	15.12.92	51.35	„	25.26	„		2.12.90
Kolar Gold Fields ...	1.6.94	9.88	5-6	12.13	5.80		1.7.02
3 BHOPAL STATE.							
(a) Bhopal-Itarsi ...	1.6.82	44.56	5-6	50.00	6.86	G. I. P. Co.,	16.9.80 30.6.87 2.12.90 21.12.00
(b) Bhopal-Parbati Section of Bhopal-Ujjain Railway ...	11.11.95	31.28	5-6	* 79.00	* 6.39	„	4.8.96 31.1.11

by the Main Line.

Terms for Working.	Termination of Working Agreement.	Remarks.
<p>The Company work the lines for actual cost plus 10 per cent. of total working expenses but not less than Rs. 1,100 per mensem in the half-year for Superintendence.</p>	<p>30th September or 31st March in any year on one year's notice.</p>	
<p>Excepting cost of extraordinary damages which is chargeable to capital, for maintenance and working including hire of Rolling Stock, the lines are debited with the same percentage of their gross earnings as may be incurred in the half-year on the entire system of B. B. & C. I. Ry. 5 ft. 6 in. & 3 ft. 3½ in. gauges, and with cost of New Minor Works costing Rs. 2,000 or less.</p>	<p>Do.</p>	
<p>With certain reservations, the working expenses for these lines are calculated at the same ratio to their gross earnings as the working expenses of the entire system of the company bear to the total gross earnings of that system.</p>	<p>On 1st January or 1st July in any year on 6 and 12 months' notice.</p>	
<p>For working and stocking the line, the G. I. P. Company receive a sum which bears same proportion to total working expenses of company's undertaking as the gross earnings of the Bhopal State Ry. bear to the gross earnings of that undertaking.</p>	<p>30th June 1925.</p>	<p>Of the capital 50 lakhs were contributed by the Bhopal State and the balance by the Govt. of India. The net earnings or losses are divided by the State and the Govt. in proportion to the capital contributed by each.</p>
<p>Do. do. do.</p>	<p>On 30th June or 31st December of any year on 12 month's notice by either party.</p>	<p>* For the whole line of 113.27 miles from Bhopal to Ujjain.</p>

Appendix XII Continued.—Indian State Railways

Name of State and of Railway.	Date first opening.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of Rupees.	Dividend per cent. in 1915-16.	Working Agency.	Date of Working Agreement.
4 SCINDIA (GWALIOR) STATE.							
(a) Ujjain-Parbati ...	11-11-95	82-00	5-6	Included, in 3 (b)		G. I. P. Co.	{ 4-8-96 20-3-11
(b) Bina-Guna-Chhabra ...	23-9-95	110-07	"	1,00.54	* 2-50	"	{ 15-7-96 20-3-11
() Nagda-Ujjain ...	15-7-96	32-51	"	22.55	8-29	BB & CI Ry. Co.	15-7-96
5 PATIALA STATE.							
Rajpura-Bhatinda ...	1-11-84	108-04	"	75.78	11-04	N. W. Ry.	30-1-93
6 JAMMU & KASHMIR STATE.							
State frontier to Tawi River ...	15-3-90	16-01	"	10.60	5-76	"	21-4-13
7 KOLHAPUR STATE.							
Miraj-Kolhapur ...	21-4-91	29-27	3-3½	23.26	6-72	M & S M Co.	17-7-91
8 Coosh Bihar State	15-9-93	33-09	"	19.77	7-18	S.B. Ry.	25-2-07

Worked by the Main Line.

Terms for Working.	Termination of Working Agreement.	Remarks.
Worked for 50 per cent. of gross earnings, except Guna Chhabra Section which is charged same percentage of its gross earnings as the working expenses of the whole system of the Company bear to the gross receipts of that system.	30th June or 31st December in any year on 12 months' notice.	* For whole line of 146 miles from Bina to Baran. See item 10.
The State is debited with a share of the working expenses of the Company's system in proportion to the total earnings, of the Nagda-Ujjain Railway in each half-year.	31st March or 30th September in any year on 12 Months' notice.	
The Railway is managed, maintained, stocked and worked for 62 per cent. of its gross earnings.	On 1st January or 1st July in any year on 6 months' notice.	
Ditto for 55.50 per cent. ditto. The N. W. Ry. allow a rebate out of their own earnings from traffic interchanged with the Branch to make up, together with its net earnings, a dividend of $3\frac{1}{2}$ per cent. per annum.	Terminable on six months' notice after 1st January 1917.	
Same as in the case of Mysore State Railways No. 2 above.	Six months' notice from either party.	
For management, working and maintenance, the E. B. Ry. retains 40 per cent. of the gross earnings, except when stock of E. B. Ry. is used on the Branch, the E. B. Ry. takes upto 45 per cent. of the gross earnings obtained from the use of such stock.	Do.	

Appendix XII. Continued.—Indian State Railways

Name of State and of Railway,	Date first opening.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of Rupees.	Dividend per cent. in 1915-16.	Work ing Agency.	Date of Work- ing Agreement.
9 RAJPIPLA STATE.							
Anklesvar-Nandod ...	1-7-97	89-24	2-6	17,13	3-99	BB & CI Ry. Co.	19-3-00
10 KOTAH STATE.							
Chhabra-Baran ...	15-5-99	37-00	5-6	Included	in 4 (b)	G. I. P. Co.	20-2-99 20-3-11
11 PARLAKIMEDI							
Nanpada-Parlaki-medi ...	1-4-00	24-62	2-6	7,67	0-11	B. N. Ry. Co.	24-1-05
12 JHIND STATE AND MALER KOTLA STATE.							
(a) Ludhiana-Dhuri- Jakhod ...	10-4-01	78-65	5-8	43,17	10-26	NW Ry.	6-9-99
(b) Jhind-Panipat ...	1-11-16	25-90	„	16,74	...	E. I. Ry. Co.	Under consi- deration
13 CAMBAY STATE.							
Tarapur-Cambay ...	20-6-07	12-36	„	8,81	4-07	BB & CI Co.	17-5-02 10-5-10
14 COCHIN STATE.							
Shoranur-Ernakulam ...	16-7-02	64-75	3-3½	71,08	4-55	S. I. Ry. Co.	1-1-08
15 MOURBHANJ STATE.							
Rupsa-Baripada ...	20-1-05	32-41	2-6	7,27	2-24	B. N. Ry. Co.	10-3-05

Worked by the Main Line.

Terms for Working.	Termination of Working Agreement.	Remarks.
Actual cost of working plus 2½ per cent on total working expenses (not less than Rs. 800 per mensem nor more than Rs. 800 per mensem) in the half-year for supervision.	At end of any financial year on one year's notice.	
Worked for the same percentage of its gross receipts as the working expenses of the whole system of the G. I. P. Railway bear to the gross receipts of that system.	31st March or 30th September in any year on 12 months' notice.	
Worked for actual working expenses.	31st December in any year on 8 months' notice.	
Worked for 52 per cent. of its gross earnings and the balance is paid to the Jhind and Maler-Kotla Darbars in the ratio of ⅔ and ⅓ respectively.	1st January or 1st July in any year on 6 months' notice.	
Managed, maintained, stocked and worked as part of the B. B. & C. I. Railway system.	At any time on 12 months' notice.	
Working expenses are made up of actual cost of renewals plus gross earning proportion of non-renewal expenses incurred, for whole system. Net earnings in excess of 2 p. c. on capital cost in any year are deemed "surplus profits" divisible ⅔ to the Darbar and ⅓ to the Company.	12 months' notice expiring on 30th September or before 31st March in succeeding year.	
Actual working expenses including cost of maintenance are deducted from gross receipts and the balance is paid to the State.	On 31st December in any year on 3 months' notice.	

Appendix XII. Continued.—Indian State Railways

Name of State and of Railway,	Date first opening.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of Rupees.	Dividend per cent. in 1915-16.	Work ing Agency.	Date of Work- ing Agreement.
16 JAIPUR STATE.							
(a) Sanganer—Sawai Madhopur ...	10-11-05	72.84	3-3½	40.97	4.58	B. B. & C. I. Co.	11-9-06
(b) Jaipur—Reengus ...	19-12-16	85.20	3-3½				
		108.04					
17 SANGLI STATE.							
Miraj—Sangli ...	1-4-07	4.90	3-3½	1.83	11.46	M. & S. M. Co.	17-7-07
18 BAHAWALPUR STATE.							
Khanpur—Chachran ...	2-7-11	22.02	5-6	14.00	1.17	N. W. Ry.	21-8-12
19 NIZAM'S STATE.							
(a) Hingoli Branch ...	15-5-12	50.31	3-3½	32.06	1.82	N. G. S. Ry. Co.	1-3-16
(b) Secunderabad— Gadwal ...	1-2-16	103.80	3-3½	82.85	...	Ditto.	...

worked by the Main Line.

Terms for Working.	Termination of Working Agreement.	Remarks.
<p>Managed, maintained, stocked and worked as part of B. B. & C. I. Ry. system. Rebate up to 10 per cent. of net earnings of B. B. & C. Ry, 3—3½ gauge from traffic interchanged with Jaipur State Railway allowed to make up, together with net earnings of J. S. Ry, a return of 3½ per cent. per annum on Capital cost.</p>	<p>Upon opening of extensions, it is open to Government to terminate the arrangement on six months' notice.</p>	<p>The following extensions were under construction :—</p> <ol style="list-style-type: none"> 1. Reengas to Sikar 31 miles. 2. Sikar to Jhunjhuno 40 miles.
<p>Worked for same percentage of working expenses upon gross receipts as is incurred on Company's system, actuals being charged in both cases for New Minor Works and Government Supervision.</p>	<p>At end of any year upon six months' notice.</p>	
<p>The railway is managed, maintained, stocked and worked for 50 per cent. of its gross earnings. Rebate is allowable from main line net earnings to make up 3 per cent. on Capital outlay.</p>	<p>After 1935.</p>	
<p>The line is worked for the same percentage of its gross earnings as is incurred on the Company's Metre gauge system, PLUS 5 per cent. of the gross receipts of the Branch for use of Rolling Stock, PLUS any extraordinary maintenance charges due to causes other than wear and tear.</p>	<p>30th June or 31st December in any year on 12 months' notice.</p>	
<p>Terms not published.</p>		

Appendix XII.—Indian State Railways

Name of State and of Railway.	Date first opening.	Length. Miles.	Gauge. Ft. In.	Capital cost in thousands of Rupees.	Dividend per cent. in 1915-16.	Work- ing Agency.	Date of Work- ing Agreement.
20 TRAVANCORE STATE.							
Tinnevely—Quilon Ry. ...	1-6-04	95-96	3—3½	1,67.42	2-12	S. I. Ry. Co.	27-6-01 21-12-10
Total ...	...	1,788	...	11,61.85	...		

Appendix XIII—Companies' lines

Nizam's Gd. St. Ry. ...	9-10-74	330-13	5—6	5,34.24	5-87	N. G. S. Ry. Co.	27-12-86
Hyderabad-Godavari Valley Railway ...	21-10-99	391-13	3—2½	2,22.46	6-55	Ditto.	16-3-97
Bangalore-Chick Light Railway Company ...	5-2-14	38-74	2—6	11.57	1-81	Mysore State Ry.	"
Total ...	...	760	...	8,68.27	...		

Worked by the Main Line.

Terms for Working.	Termination of Working Agreement.	Remarks.						
<p>The line is worked for the same proportion of its gross receipts of each half-year as obtains on the whole of the Company's undertaking. The net earnings after meeting interest on debentures, etc., are treated as surplus divisible between the Govt. and the Company in proportion of assumed capital as in the case of S. I. Ry. The Durbar has underwritten the guarantee of interest on capital cost of portion of line in its territory and it has been agreed that the surplus obtained by the Govt. of India, shall be divided between them in proportion to the respective lengths of the British and State Sections of line, and that the share of any deficiency attributable to the State Section shall be borne by the Durbar, while that attributable to the British Section may be recovered from the Company's share of surplus due from the S. I. Ry. for the same or next half-year.</p>	<p>31st December 1945 or at end of any succeeding fifth year.</p>	<p>Debentures raised by the company:—</p> <table><tr><td>3½ per cent.</td><td>£ 29,517</td></tr><tr><td>4½ " </td><td>£ 418,274</td></tr><tr><td></td><td><hr/>£ 447,791</td></tr></table>	3½ per cent.	£ 29,517	4½ "	£ 418,274		<hr/> £ 447,791
3½ per cent.	£ 29,517							
4½ "	£ 418,274							
	<hr/> £ 447,791							

guaranteed by Indian States.

<p>Indian company with 4 per cent. guarantee by the Mysore Durbar. Railway constructed and worked by the State.</p>	<p>1st January 1934.</p> <p>Ditto.</p>	<p>See Chapter V, pages 283—85.</p> <p>Ditto.</p>
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Appendix XIV.—Indian Railway Lines in

Name of Railway.	Date of contract.	Date of first opening.	Length of line open on 31st March 1918	Capital cost on 31-3-1918.	Percentage of net yearly earnings on capital outlay for 1915-16 & 1916-17.	GOVERN.
						Land.
GAUGE 3 ft.—3½ in.						
Pondicherry Railway Company	30th Decr. 1890.	15th Decr. 1879.	7.85	5.69	9.26 8.34	Not Specified.
West of India Portuguese Railway Co., London ...	18th April 1881. 9th Decr. 1892.	17th January 1887.	51.10	1,94.47	1.69 1.51	Free by Portuguese Govt.
Peralam-Karaikkal Railway belonging to French Colonial Government ...	27th March 1902.	14th March 1898	14.65	7.24	3.18 3.06	Free by both Governments
Total ...	...	...	73.60	2,07.40	...	...

foreign territory worked by British Companies.

MENT AID.		PURCHASE BY GOVERNMENT.		Remarks.
Subsidy.	Working terms by Main-line.	Date of expiry of contract.	Price payable to the Company.	
Nil.	Worked by S.I. Ry. Co., at the same percentage of working expenses on gross earnings as incurred on S. I. Railway.	On six months' notice by either party.	Nil.	French territory. Head office of the Company is in England.
Guarantee of interest at 5p.c. per annum on company's capital by Portuguese Govt. in consequence of cessation of annual subsidy of 4 lakhs of rupees which was formerly paid by the British Govt.	Worked by the M. & S. M. Railway working expenses are divided in proportion to respective gross earnings. Net earnings belong entirely to the West of India P. O. Portuguese company surplus profits in any year are to be divided equally between the Portuguese Govt. and the W. I. P. Coy.	1 At any time by six months' notice by either party. 2 After 30 years from date of first opening.	1 Portuguese Govt. to pay to the company full capital cost of Railway and works plus 10 per cent. and the value of rolling stock, machinery, etc. 2 Ditto less 10 per cent. if the company surrender. If Portuguese Govt. take over, the market value of shares, debentures & stock of the company during the three preceding years is to be paid. 3 After 99 years the line becomes the property of the Portuguese Government but the rolling stock and movable machinery, etc. have to be paid for at their fair value.	
Nil.	Constructed and worked by S. I. Ry. Co. Working expenses are charged at the same proportion of gross earnings as obtained on S. I. Ry., plus cost of repairing extraordinary damages and of New Minor Works & 5p.c. for use of rolling stock & 5p.c. per annum on Rs. 30,000 for use of workshops, etc.	On twelve months' notice by either party, expiring on 30th June or 31st December of any year.	Purchase not stipulated.	The line is partly in British & partly in French territory.

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